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Youth and Economic Opportunities

Produced in partnership with Making Cents International and the Citi Foundation

ENTREPRENEURIAL SOLUTIONS TO GLOBAL CHALLENGES

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Introductory Essays

Lead Essays

Case Narratives

Special Issue for the 2013 Global Youth Economic Opportunities Conference

About *Innovations*

***Innovations* is about entrepreneurial solutions to global challenges.**

The journal features cases authored by exceptional innovators; commentary and research from leading academics; and essays from globally recognized executives and political leaders. The journal is jointly hosted at George Mason University's School of Public Policy, Harvard's Kennedy School of Government, and MIT's Legatum Center for Development and Entrepreneurship. Topics of interest include entrepreneurship and global development, the revolution in mobile communications, global public health, water and sanitation, and energy and climate.

Authors published in *Innovations* to date include three former and one current head of state (including U.S. Presidents Carter and Clinton); a Nobel Laureate in Economics; founders and executive directors of some of the world's leading companies, venture capital firms, and foundations; and MacArthur Fellows, Skoll awardees, and Ashoka Fellows. Recently the journal has published special editions in collaboration with the Clinton Global Initiative, the World Economic Forum, the Rockefeller Foundation, Ashoka, the Lemelson Foundation, and Social Capital Markets.

Making Cents International and
Citi Foundation

Introduction to the Special Issue

This youth-focused double issue is the product of a shared passion to improve livelihoods and economic opportunities among the world's 1.8 billion youth. The publication is particularly timely given the increased focus being given to programming, funding, and research on the contributions of young people in a time of economic volatility. As the economy shows signs of recovery, the International Labor Organization reports that the global rate of youth unemployment hovers around 13%, just below the jobless rate at the peak of the crisis—this still represents an estimated 73 million young people. Despite staggering unemployment, our concern is not the scale of the problem. Instead, we are encouraged by the scale of the opportunity before us.

With the support and collaboration of the Citi Foundation, Making Cents International will leverage this *Innovations* issue as well as the annual conference, funder meetings, "Apply It!" webinars, blogs, crowd-sourced solution events, and other tools to engage a global network of partners to galvanize dialog, collaboration, and knowledge-building toward a collective global agenda for youth. Through its Collaborative Learning and Action Institute (Co-Lab), Making Cents will promote and improve economic opportunities for youth around the world. This year, the Co-Lab aims to strengthen knowledge management in the field, enhancing the scope and depth, diversity, and quality of how and what our people learn. Co-Lab gives our stakeholders and partners a new platform to both add value and benefit from knowledge management that translates ideas into solutions.

The following collection of analyses, research, and remarkable stories is a part of our new vision. In searching for authors, we weren't searching for all the answers. We looked across diverse sectors for authors who could connect disparate concepts, innovations, theories, stories, or research results that move the youth economic opportunities agenda forward.

To highlight a few authors, first and foremost, we hear the voices of young people describing the hard work, ambition, fortitude, and support needed from others to bring innovations to old problems. Arnest Sebbumba, a young farmer, takes us into rural Africa and reveals the choices, challenges and opportunities facing agricultural entrepreneurs in Uganda. Social entrepreneur and Founder of Souktel, Jacob Korenblum, shares the thrills and spills of navigating entrepreneurship and identifying new opportunities in conflict-environments.

Featuring best practices and innovations in youth employment, Jamie McAuliffe's case study of Employment for Education demonstrates how the NGO created a youth jobs model that reverses conventional supply-driven education processes that often widens unemployment. Meanwhile, Michael Chertok and Jeremy Hockenstein, of Digital Divide Data, highlight a growing $300 billion business process outsourcing industry, and the economic potential of Impact Sourcing as a "game-changer" for scaling skilled jobs among youth.

> This youth-focused double issue is the product of a shared passion to improve livelihoods and economic opportunities among the world's 1.8 billion youth.

Innovations aimed at increasing financial education, access, and inclusion among young people is critical. Research from Jamie Zimmerman and Julia Arnold of the New America Foundation chronicles various models that incorporate mobile technology into youth financial services programs, illustrating both the promise and, notably, high-cost and regulatory barriers to implementation.

Underscoring the critical role of the private sector, Branka Minic, Nicholas Davis, and Ebba Hansmeyer and their team approach youth capacity from the perspective of developing talent within the corporate workforce. Their model enables businesses to find and develop talent to fuel growth, productivity, efficiency, and innovation while providing young people with the skills and knowledge they need to more easily secure employment. Simultaneously, Akhtar Badshah and Yvonne Thomas of Microsoft, reflect upon the company's core philanthropic philosophy—providing information and communications technology (ICT) training that empowers individuals with high-demand skills.

We extend our sincere thanks and appreciation to the authors who invested their time, energy, and expertise to produce this special issue, which both embodies and inspires a guiding theme of collaboration. And, in that spirit, we ask readers to consider how they might apply these lessons and innovations to their own work, and share their results with us. Many of these authors will be featured in "Apply It" learning events throughout the coming year at www.YouthEconomicOpportunities.org. We look forward to your participation.

Making Cents International *Citi Foundation*

Jasmine Thomas

Investing in the Economic Progress of Youth

Building stable and sustainable economic growth is dependent on a predictable and capable pipeline of talent, producers, innovators, and buyers. In a globalizing world, it is increasingly hard to grasp how this pipeline will be developed without better ideas, targeted investment, and more inclusive models supporting young people. We know that many countries' populations are aging, and that there are economic consequences to falling short in our response. Just look at Japan and most of Western Europe as they struggle to overcome economic stagnation. While much of this stagnation can be attributed to insufficient economic and industrial policy, having low-to-no population growth in many countries may also play a role Many growing economies, despite significant global headwinds, fundamentally have population growth on their side. Whether it is through the slow, methodical pace of the United States or through the astonishing speed of some African markets, young people and young businesses are increasingly the foundations of this growth.

Population growth alone, however, is not the answer and does not always involve young people. As we have seen in much of the turbulence in the Middle East and North Africa, younger populations with limited ability to formally contribute to the economy become disenfranchised. Growth must be inclusive, particularly for youth, to be sustained over time. We consistently see these issues when considering grant investments in countries around the world. The Citi Foundation invests in best-in-class community organizations that support economic empowerment and financial inclusion in most of the countries where Citi operates. Our ability to fund innovative programs in nearly 90 countries gives us a global perspective unmatched by most other philanthropic institutions. Further, our close collaboration with our Citi colleagues makes us acutely aware of the negative consequences of limited economic growth and poorly trained talent. Now, more than ever, we recognize an urgent need for investment in and support of programs that drive youth economic opportunities. Sharing this vision are millions of practition-

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ers, researchers, educators, as well as government and business leaders who collaborate with us to source and deliver pathways to entrepreneurship and employment for youth.

To assess our own efforts to invest in and support youth economic opportunities, the Citi Foundation examined its existing investments in organizations supporting young people to understand how its funding improved their lives and economic circumstances, as well as where further improvement was needed. Across the portfolio, it became apparent that there were some investments that stood out from the others. These investments fund non-governmental organization (NGO) partners that were breaking away from traditional concepts and adopting new approaches that frequently packaged inputs in education, on-the-job training, direct access to hiring employers, and access to finance for entrepreneurs. This suite of services made for more efficient implementation, which often reduced operational cost while creating a "one-stop shop" experience for the young person. At the systems change level, we also continued to see a need to better understand and improve the broader ecosystems that support these programs. How is it that countries, like Israel, and communities, like Silicon Valley, are developing so many innovative and high-growth companies that are frequently led by and employing young people? It is advantageous for countries to develop a culture with a supportive regulatory environment that cultivates entrepreneurial activity, allows products and services to be efficiently produced, and protects financial assets. Several grantee partners are working at this level to shape the dialogue and influence how policymakers consider new, more effective approaches.

THE CITI FOUNDATION'S NEW YOUTH ECONOMIC OPPORTUNITIES PORTFOLIO

This year, the Citi Foundation will award nearly $80 million in grants to NGOs implementing programs across 90 countries. Outside of the U.S., $7 million in grant funding will help young people obtain training, secure jobs, and start businesses that will increase their earning potential. In our Youth Economic Opportunities portfolio, we have refreshed our focus and approach toward a greater emphasis on income-generation opportunities, and will support organizations with a goal of increasing the number of young people, ages 13-25, who actively generate an income through a quality, living-wage job or through entrepreneurship. Many of these programs will likely provide a combination of academic, livelihood, and vocational skills training as well as entrepreneurship preparation necessary for youth to achieve their goals and contribute to the economy.

Each of the Citi Foundation's six portfolio areas has a set of results and impact assessments that help us to analyze the effectiveness of the programs we fund. For instance, in our portfolio aimed at helping young people generate or earn an income, we measure the extent to which participants:

- Obtain academic and/or training qualifications and acquire new skills, like secondary school credentials or financial knowledge and skills;

- Implement new or enhanced skills gained through experiential education or on-the-job training toward a tangible end goal, such as completing a feasible business plan or career development plan; and
- Successfully access financial or employment resources to launch a business or secure a job.

As part of a broader learning agenda, the Citi Foundation and its partners work together to widely communicate grant outcomes with the goal of contributing toward existing knowledge in the NGO sector, highlighting promising models for integration within systems, and catalyzing improvements in policy. In addition to investing in programs that help young people generate and preserve financial gains, our new portfolio funds aim to garner field discourse and model best practices among other key stakeholder groups in the field. What is more, we believe it is important to better understand which approaches are both cost-efficient and effective in helping young people gain well-paid jobs or secure resources to launch a viable business. Many programs in the field expose youth to some sort of training, mentoring, and experiential learning. However, it is unclear which combination of these elements or other supportive resources will have the greatest impact upon the financial lives of young people and produce lasting economic stability over time. More research as well as tested models will greatly improve our knowledge of what works best for youth. As partnerships and program investments demonstrate positive results, our grant funding can make timely improvements in policies and larger systems with potential to influence their long-term outlook. For example, to create pipelines of talent and successful entrepreneurs, policy frameworks must align with local economic goals, skills and education systems, as well as the business community to dramatically increase youth employment. Enabling policy and regulatory environments are also critical to help young people access resources needed to spur entrepreneurship and grow viable businesses.

LEADING PORTFOLIO EXAMPLES

Government as an Innovator-Singapore

In some of the communities where we invest, there are unique opportunities to scale NGO program models within national initiatives and systems. Many of our government partners are leading the development of new and innovative models themselves and relying on local community organizations for execution. In a partnership with the YMCA of Singapore, the government of Singapore is promoting an agenda that invests in youth as necessary contributors to supporting low-income communities. The *Youth for Causes* initiative equips secondary school youth with employability and entrepreneurship skills to increase the capacity of local civic and social service organizations. Since its launch in 2002, Singaporean youth have been participated in delivering critical capacity-building skills and services that meet the needs of nearly 1 million low-income residents while creating a culture of community engagement throughout the country. This program illustrates the impact that can be achieved with government leadership and the capacity and reach of a large-scale, social services provider.

Instilling Entrepreneurship and Employability Skills for Success-Middle East

Since its founding in the early 1900s in the United States, Junior Achievement Worldwide (JA) has grown into a global organization well-known for providing economic education and training to youth. Its signature entrepreneurship program, the Company Program, provides enhanced business and financial management knowledge and experience to more than 350,000 secondary school students, globally.

INJAZ Al-Arab, the regional affiliate of JA Worldwide, is one of the most recognized affiliates within the JA global network because of its track record of fostering a culture of business innovation and entrepreneurship across the Middle East and North Africa region. In less than a decade, the organization has grown to operate across 15 countries and partner with 15 education ministries to offer high-quality experiential education and training. The organization has reached more than 1.6 million students through its programs. Each year, its adapted model of JA's Company Program equips nearly 6,000 young people with financial education, job readiness, and enterprise development skills that lay a foundation for their economic success.

Harvard University's Fernando Reimers recently completed an independent impact study to determine the outcomes associated with the INJAZ Company Program implemented in Jordan, Lebanon, Morocco, Egypt, Saudi Arabia, and the United Arab Emirates. Key findings from the report indicate a seismic shift in the attitudes, beliefs, and skills of the program's alumni because of the blend of training and mentorship incorporated into the model. Some of the high level findings include:

- Increased entrepreneurial attitudes and beliefs as compared to peers.
- Viewed start-up businesses as a viable mechanism to generate new ideas, create jobs, and resolve important social problems.
- Increased recognition that women can play an important role in facilitating successful businesses.
- A vast majority successfully developed career goals and experienced increased confidence in their ability to compete for local jobs.

Further, the results of the study showed that the program model also had an impact upon the employability of participants. Nearly 90% of INJAZ alumni were successfully employed within 12-months of graduation as compared to 30% of peers.[1]

Given significant unemployment among young people in the region, these findings are encouraging. INJAZ Al-Arab's program model offers evidence that entrepreneurship training along with skill-building and hands-on experience, like launching and operating a business, generates positive results for youth. The findings also emphasize the contributing role that business mentors and institutional leaders play in the process of forming a pipeline of new young professionals and entrepreneurs. Business leaders offer youth a reflection of the characteristics and traits necessary to achieve success as well as a source of encouragement to nurture their potential as economically productive future professionals and entrepreneurs. INJAZ Al-Arab's Company Program fosters a spirit of tenacious ambition and inspires a vision of a more prosperous future for Arab youth. Yet, over time, it is important to understand if this success can be replicated in other markets or only attributed to INJAZ.

Finding Efficiency and Scale in a "One-Stop-Shop" Approach-China

Established in 2005, the BN Vocational School (BNVS) is China's first tuition-free, non-profit charitable vocational school. It now operates in eight cities and serves more than 600 students annually. Unlike more traditional Chinese education and teaching models, BNVS delivers a "One-Stop-Shop" approach of intensive and comprehensive education, which "up skills" and connects youth with demand-driven credentials to employers with available jobs. Youth make a two-year commitment to complete their secondary school training and certificates while mastering a viable trade and skills that employers seek.

The first year features accelerated academic courses in mathematics, Chinese and English language and literature, delivered in tandem with vocational training in jobs like hospitality, construction, and electrical maintenance, "soft" skills training in communications and professional etiquette, as well as life skills like Chinese traditional culture. Upon completion of the second year, youth receive a paid internship placement with a local employer, and obtain a secondary vocational education diploma after passing relevant vocational qualification examinations and an internship assessment. Students participating in internship placement earn monthly salaries between RMB 800-1200 (USD$128-192). To date, more than 1,000 young people have completed the program and remain employed in a full-time position, earning well more than China's minimum average monthly salary of RMB 2,049 (USD $330)[2]. Some 70 percent have become a part of their employer's core technical team and more than 10 percent hold management positions.

Aligning Financial Education for Lifecycle Development-Colombia

In Latin America, Dividendo por Colombia is known for its high-quality programs, positive impact on low-income families, and commitment to the sustainability of the nation's communities. Its program, *Finanzas para el Cambio* ("Finances for Change"), provides a foundation for promoting financial education among young Colombian public school students as part of a comprehensive set of skills necessary to ensure young people succeed throughout their life To date, the program has educated 22,000 low-income public secondary school students in Colombia's major cities. Because of the outcomes of the program, the Colombian government is seeking to scale the model by including the financial education curriculum in all of Colombia's public schools.

Beyond the direct value of consumer financial education, Dividendo's curriculum stimulated young people's interest in entrepreneurship as a result of conversations about economic opportunities with which they could participate. In 2010, Dividendo por Colombia established the Empresa Recicladora Alfredista initiative which enables young people who participated in the Finances for Change program to put their newly acquired financial skills into practice. The initiative helps youth living in Medellín start and run environmentally-friendly recycling businesses. Leveraging the Servicio Nacional de Aprendizaje, a government initiative, they have an additional opportunity to enhance their business management skills and grow their existing businesses and/or complete a national entrance exam that will enable them to continue toward post-secondary education and training costs.

CONCLUSION

The Citi Foundation's investments in promoting economic progress among young people have taught us that accessing and obtaining a quality education is critical within a life-long development process. However, formal education is only one aspect within a broader goal and purpose of increasing empowerment, becoming financially included, and productively contributing to the formal economy. Our renewed and targeted investment approach aims to help more youth generate or earn an income and achieve financial stability and assets. To complement Citi's corporate commitment to enabling progress, the Citi Foundation's philanthropic investments in the Youth Economic Opportunities portfolio aim to bring young people into the economic mainstream. Through realigned and newly crafted partnerships, our grant funding is uniquely positioned to support the growth of efficient, market-driven approaches that better connect more youth to available jobs and connect entrepreneurs to capital and other resources. Further, the importance of fostering supportive economic environments and policies cannot be taken lightly, and should be informed by initiatives with proven market-specific results for young people. Ultimately, many of these initiatives will involve multi-sector partnerships where both private and public sector actors invest in the uptake and expansion of models that directly benefit young people and the local economy. Much of the success of this new direction will largely depend on the leadership, strength and ingenuity of our partners to drive economic progress for youth around the world.

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1. Fernando Reimers, "Unlocking Arab Youth Entrepreneurship Potential: An Evaluation of the INJAZ Al-Arab Company Program" (unpublished working paper, Harvard University, 2013).
2. National Bureau of Statistics of China, http://www.stats.gov.cn/tjfx/grgd/t20130517_402897153.htm

Arnest Sebbumba

Finding the Word for Entrepreneur in Luganda

On March 29, 2010, we watched the birth of our first calf conceived using modern technology. As she entered the world, I was struck by how quickly she managed to stand on her feet. For such a delicate animal—when she lay in the grass her skinny legs looked like a pile of sticks—she was impressively strong.

Our new addition was a breath of fresh air, but more than that, she was the tangible result of the several years I'd spent conducting research on the internet and reading articles about animal husbandry— studies that no one in my family had thought to undertake before that. She represented a progression toward greater self-sufficiency and more dependable revenue for the farm, and thus toward greater stability for those of us who depend on the land.

A year earlier, we had lost my heifer to East Coast fever, a common disease affecting farm animals in my home region of Kayunga, Uganda. It's hard for anyone who did not grow up on a small family farm to understand how much loss and devastation such a death causes in terms of potential income generated from the farm, and all the effort expended in taking care of the animals. Also, it greatly affects the family's ability to pay school fees, which come through the sale of farm animals. We agonized over the details. Which warning signs did we miss? Could we have intervened if we had recognized them?

No doubt this sort of unpredictable stress, a hallmark of farming life, is the reason many of my peers sought paths to more "professional" careers in sectors like technology, government, banking, and business. At 25, I am one of the very few in my age group who want to stay on the farm.

Though my family has managed the farm—troubleshooting and performing daily crisis interventions—for three generations, my grandfather and father still lacked the expertise to respond to East Coast fever. They fit into a wider culture of

Arnest Sebbumba is a 25-year old Ugandan farmer, entrepreneur, and technologist. He has experience in entrepreneurship and financial management, and was a member of the International Labour Organization (ILO) Youth Entrepreneurship Facility. He has put his entrepreneurial skills to work expanding his family farm and teaching young people about effective agriculture through the organization he founded, Countryside Youth Foundation.

local farmers who fail to see the opportunities offered by agribusiness practices. I don't blame them for this shortsightedness; if I've learned anything about entrepreneurship, it's that not all entrepreneurs are "born entrepreneurs." Entrepreneurial farm owners like myself are a product of the right environment: one that inspires, and that nurtures imaginative interpretations of "what could be." And, in most cases, this current of innovative ideas must be injected into a community.

My father and I beamed over our newborn calf, relieved that our first experiment had succeeded. The farm's newfound vitality wobbled tenuously, as if balanced upon scrawny legs itself, but this first step proved our resilience. And it was an argument, however small, that perhaps I was onto something in believing that my generation could and should pursue innovative, business-savvy farming as a stable livelihood.

NO WORD IN LUGANDA FOR ENTREPRENEUR

It is difficult to translate the word "entrepreneur" into my native tongue, Luganda.

Most of my friends come from farming families, but few of them have any interest in managing their farms for a living. Agribusiness skills aren't taught in local schools, though our population is overwhelmingly agrarian; instead, most young people aspire to an education that will lead to respected professional jobs. This avenue is widely viewed as the best choice for a well-educated young man, as so few people are aware of the economic potential presented by the land.

I was privileged and grateful to be sent to a good local boarding school. This was possible because my dad had established himself in Kampala, the capital, where he could spend a few days each week repairing automobile electrical systems. That extra income meant he could afford to send my siblings and me to boarding school.

The annual cost for us to attend boarding school was 3,000,000 Uganda shillings or approximately $1,200 US. During vacations from school, I recall biking from my family's home to the farm each morning to milk the cows; this always felt like dull maintenance work, as the indigenous cows we had at that time yielded so little milk. It was just one of the many endless chores our family performed every day to ensure our security, but ultimately they did nothing to improve our fate. At 16, my father enrolled me in supplementary computer lessons, which I would attend in the afternoons after I completed my chores. I looked forward eagerly to the lessons, seeing them as a more productive use of my time.

It was around this time I also began managing the farm, taking over for my father by overseeing all operations. He had dedicated years to preparing me for this transition, patiently passing on his acquired skills in farming, husbandry, and electrical installation. But I continued to think of the farm as a part-time duty that served merely to subsidize my studies and keep my family afloat.

Like so many of my peers, I too would have sought employment in the technology sector after graduation, were it not for the training I received through a program called STRYDE (Strengthening Rural Youth Development through Enterprise).

STRYDE is a four-year regional youth enterprise development program run by Technoserve, which enables youth aged 18 to 30 to transition more successfully to economically independent adulthood. It begins with a three-month training course containing five training modules: personal effectiveness, personal finance, professional effectiveness, entrepreneurship, and agribusiness. After the training, participants engage in a nine-month aftercare program that involves a mentorship program with a local business, job fairs and expos, finance clinics, and a business plan competition. The objective of the training is to push participants to see past the limiting local status quo—traditional farming methods people have adhered to for decades—and to challenge us to consider how to scale our farming operations, address long-standing problems like East Coast fever, and recognize new opportunities for expansion. It encourages us to think of agribusiness as a potentially powerful use of our educational backgrounds in business and technology, thus increasing our opportunity, ability, and motivation to engage in income-generating activities. For four hours a day, twice a week, I and 24 other participants learned finance, business, and entrepreneurial skills as they applied to the land.

It wasn't until this training that I began to see the land as an expansive blank canvas.

It wasn't until this training that I began to see the land as an expansive blank canvas. After all, what can be made of soil, water, and sunlight? Nearly anything. The course opened my eyes to the potential of the assets I already had at my disposal, and allowed me to acknowledge my strengths and the opportunities that literally existed in my own back yard; in fact, in our own back yard I established a zero grazing unit, keeping some cows under intensive management with restricted movement, unlike the free range on the larger farm I am running as a business. Perhaps more importantly, the course boosted my confidence that I could succeed with such initiatives as sustainable business models.

Ultimately, I chose to bet on the land, abandoning technology for an adventurous future in agribusiness. Small victories have convinced me that this is a viable option not only for myself, but also for other young Ugandans.

GETTING INTO THE RESEARCH AND SOCIAL ENTREPRENEURSHIP WORLD

In 2012 I was one of nine young people aged 19 to 24 invited to join the MasterCard Foundation's Youth Think Tank as a part-time researcher to conduct qualitative research about the employment and enterprise experiences of young people in Uganda. Along with my peers from Kenya, Rwanda, Ghana, and Sierra

The Youth Think Tank Report

The most rewarding part of the interview process for me was getting insights about unemployment that are based on views and experiences of … peers and community helpers. Given the fact that I serve a youth organization, these will be used to design more suitable projects for the youth in my community... The most challenging part of the interview process was translating some words, specifically "an entrepreneur," to the local dialect that some interviewees could understand.

Leone, I gathered insights to answer this question: How can we increase youth employment (formal, informal, and self-employment) in growth sectors such as agribusiness, green growth, information and communications technology, and financial services? Together we conducted 160 interviews; then, through 10 days of online discussion and a 2-day face-to-face session in Nairobi, we wrote the report.[1]

"Experts" who come from a very different reality often try to intuit the needs of youth on the cusp of their productive lives, based on a set of demographics or statistics about youth unemployment, but few have thought to interface directly with them. Perhaps because I am in this phase of life myself—because I have the perspective of a young man from rural Africa—I see great value in programs like the Think Tank. This is my own future in the hands of governments, NGOs, and big business.

As we compiled these personal stories in the Think Tank project, we saw that youth in East Africa consistently said they wanted "increased access to leaders and decision-making processes." They also wanted to know more about professional options, and "the markets and industries that hold the greatest opportunities for employment," and said they needed greater access to employment and entrepreneurship training programs. We believe that if these young people are included in decision-making processes, often provided by programs like STRYDE, they will be more likely to succeed.

On a personal level, I have benefitted tremendously from the network I developed through the program. Surrounding myself with creative, solution-oriented individuals has been socially and economically empowering, allowing me to further explore my own farm's potential. But more importantly, it has inspired me to think about how I could help my own community. The group nurtures a mentality that values entrepreneurial solutions to social problems, and it is this supportive ecosystem that drives my own volunteer work with agribusiness forward.

I had observed that my peers, who had no agribusiness education, were not behaving in economically rational ways. As this was severely affecting the standard of living among youth in my local community, I set about looking for solutions. Armed with new knowledge about the needs of local youth and a new focus on social entrepreneurship, last year I dedicated myself to building on a nonprofit concept I developed three years ago. The organization, Countryside Youth

Foundation (CSYF), allows me to share with others the confidence I gained from programs like STRYDE. CSYF encourages young people to look for existing opportunities that are just waiting to be recognized.

CSYF provides agrarian youth in my home district with increased access to information through publications provided by the Technical Centre for Agricultural and Rural Cooperation (CTA). Among the topics covered are animal husbandry, crop production, handling harvests and storage, and marketing produce, as well as information technology. I had a theory that if the family farm was framed as a social enterprise, one that addresses social and economic challenges in rural Africa, then more young people would be interested in dedicating themselves to farming. CSYF is testing that theory in action; it is my hope that the organization will allow youth to empower other youth in the community by increasing their knowledge, and therefore their economic potential.

Continued support for agrarian enterprises and the sustained introduction of innovation are crucial, not only to the individuals who make a living off the land, but also to the survival and growth of the community as a whole.

Professional jobs in the tech industry and other sectors are by no means less worthy career paths; the local educational trend that fosters such preferences is valuable in its own right. But continued support for agrarian enterprises and the sustained introduction of innovation are crucial, not only to the individuals who make a living off the land, but also to the survival and growth of the community as a whole. A healthy agribusiness community reduces local vulnerability, but schools are not teaching children how to manage a farm and farming apprenticeships are nearly non-existent. So we must work to evolve a solution.

THE CHANGE IN OUR FARM AND MY ASPIRATIONS

Among other things, my agribusiness training has coached me to address East Coast fever on our farm, preventing the deaths of dozens of our animals. In part, my ability to dedicate my time to the farm, rather than to other economic pursuits, is responsible for this change. A business-minded approach has allowed me to carve out a livelihood for the family from land that previously provided us only with a precarious subsistence.

Artificial insemination was another strategy I introduced to our farm. We also introduced a composting program that saves us money we would normally spend on fertilizer and brings in a little extra income, as we've begun selling our compost to other farms in the area.

The programs I participated in did not specifically recommend initiatives like these. Rather, they were valuable because they encouraged us to take a broader perspective on the possibilities each of us had at our disposal. They challenged the participants in the programs to see the opportunities in commercializing and scaling already-existing activities; I was inspired to greatly expand our farm's dairy operations. My family expects we will soon produce roughly 100 liters of milk per day, and I am currently revising the business plan for submission to the competition run by STRYDE.

Mine has been a journey with many legs, accumulating greater security for my family and, hopefully, an opportunity to make a valuable contribution to my community. The CSYF has trained 10 young people in its first three months, but the next step is to establish the foundation as a powerful training and information resource for youth in all nine sub-counties in the district.

My work with CSYF is intended to contribute to a new local tradition of thriving entrepreneurship and solution-oriented thinking. I would not expect my children to choose agribusiness—I hope that they can have the education and training they need to follow their own dreams and pursue their own interests—but CSYF is the brick I can offer to the construction of such an enterprising culture.

If Luganda does not yet have a word for "entrepreneur," then I figure it's my generation's charge to invent one.

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Judith Rodin and Eme Essien Lore

Youth Opportunity: Rethinking the Next Generation

For at least the last 100 years, each generation has come of age in the face of unique challenges and opportunities that have ultimately defined it. In the early 1900s, it was the emergence of industry, which enabled young people to rise above their economic circumstances in ways their parents could not. Generations raised in times of war developed much different values and worldviews than those raised in more peaceful eras.

For the current generation of young people, the defining characteristic may be the rampant unemployment that has spread across the globe. True, the 2008 financial collapse created employment struggles for all generations, but none more so than youth. According to *The Economist,* nearly a quarter of the world's youth are currently unemployed and not in school or training.[1] In Africa, young people make up more than 80 percent of the unemployed population; in Greece and Spain, unemployment among people age 25-24 surpassed 50 percent in 2013;[2] and in the United States, the youth unemployment rate is more than twice the national average.[3]

While the issue of youth unemployment is universal, the drivers of this trend are unique to each region. In the United States, six million young people are unable to find jobs, whether a high school student who cannot find afterschool work or a college graduate who must settle for an unpaid internship. In Africa, the problem takes on a much different texture: the continent's bulging youth population has outpaced job creation, and longer life expectancy means workers are remaining in the workforce much longer than before, resulting in fewer opportunities for youth to enter the workforce. Despite economic gains in South Asia, nearly one in three young person is out of work, due to gender inequities, cultural norms, and a com-

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plex web of laws and regulations that tend to keep young people out of jobs in the formal economy.[4]

No part of the world has been immune to the youth unemployment crisis, and both the immediate and long-term implications could be severe. Young people who are not on track to secure employment are often stuck in a self-perpetuating cycle of poverty and instability. Their future earning potential is stilted, and they are likely to settle for part-time jobs or temporary work. As a result, today's youth, many of whom are concentrated in urban areas, face high levels of social exclusion and lack clear access to the safety nets that employment can provide: health benefits, retirement accounts, and pensions. As the United Nations Human Settlements Program has noted, "urban youth life tends to take place in worlds that are largely separate from the rest of society," and as more young people resort to crime and other illegal activities to generate their livelihoods, the danger can be extreme.

> To change the dynamic, we must change our mindset, from viewing the youth bulge as a challenge to be solved to seeing it as an opportunity we must harness.

Long-term youth unemployment also has a dramatic impact on the economy at large. In Canada, jobless youth are estimated to miss out on $10.7 billion in wages;[5] in the United States that number could be as high as $18 billion.[6] The economic and social consequences will likely weaken the next generation's ability to be resilient as they face their own shocks and disruptions—natural, climate driven, and man-made—which will only increase in frequency, scale, and impact over the coming decades.

Many already have termed the current crop of young people a lost generation, but with the right approaches and the will to act, the global community can find new opportunities that not only create jobs and boost incomes but also improve livelihoods and business practices.

REGIONAL APPROACHES

The Rockefeller Foundation's mission, unchanged since its founding in 1913, is to promote the well-being of humanity. Youth unemployment is among the most detrimental threats to human well-being around the world, in terms of both the immediate economic impact on individual livelihoods and how it can affect entire systems, particularly in cities. As such, for the last several years, the foundation has explored new solutions to the challenge both in the United States and across Africa, where the youth population is set to double by 2030.[7]

In the United States, we see the greatest opportunity in helping put those six million youth who are out of work and not in school on a pathway to sustainable employment. The foundation was pleased to support creation of the Leadership Council for the Aspen Forum for Community Solutions, an evolution of the White House Council for Community Solutions, to which I was appointed by President Barack Obama and served on for two years. The Council found that here in the United States the capacity for innovation and creativity is often greatest within communities, rather than at the federal level. Communities often can implement more effective and cost-efficient solutions than federal programs can provide, thereby creating scalable models that others can replicate.

OPPORTUNITY YOUTH IN AFRICA

The unemployment gap in Africa's more than 50 countries requires much different but equally complex solutions than those in the U.S. We see opportunity at the apex where three enduring trends meet: the rapid urbanization, digitization, and globalization of our world.

Urbanization, Globalization, and Digitization

Today, half of the world's population lives in cities, and that number is growing. It is expected that three-fourths of the world's people will call cities home by 2050. That fact is most pronounced in the developing world, with both Asia and Africa experiencing massive population growth.[8]

For the first time in history, more young people live in urban than rural areas. By 2030, young people under the age of 18 are expected to make up 60 percent of the world's urban population, which will put them in ever greater competition for a finite number of jobs.[9] Urban youth are often likely to live in slums or other unplanned settlements, making them vulnerable to poverty. However, with young people flocking to cities in search of new opportunities and economic mobility, urbanization can be a driver of innovation and economic growth.

The increase in digitization also has enormous implications for the African continent. More than 2.5 quintillion bytes of data exist in the world today, 90 percent of which have been created in the last two years,[10] but we certainly are not close to reaching a data peak anytime soon. Businesses and organizations of all sizes and types—universities, libraries, governments—need workers who can curate and manage that data, from people who transcribe printed books into digital formats to those who create databases to mine insights from consumer data. In Africa, with an increasing demand for e-government services and the exponential growth of a consumer base with improved access to technology, the digitization needs are particularly pressing.

And, finally, globalization means these jobs can be done from anywhere in the world, not just at company headquarters or in government offices.

A Booming ICT Sector

The combination of these three trends has led to leapfrog advancements in Africa's information communications technology (ICT) sector. Countries such as Ghana, Kenya, South Africa, and Egypt are implementing key policies and incentives to support and grow their ICT sectors as vehicles for job creation.[11] Government support for laying fiber optic cables to enhance ICT capacity has led to an exponential increase in Internet connectivity.

In addition, African corporations are emerging as major players alongside multinational corporations, which are expanding and will continue to expand to Africa, further increasing demand for a skilled labor force and business process outsourcing (BPO) services. It is no coincidence that Nigeria, home to nearly half of Africa's multinationals, also has the largest ICT sector.[12] The expansion of multinationals into Africa and the creation of homegrown African corporations together will create opportunities for ICT-enabled employment. The global BPO and information technology outsourcing sectors together are expected to reach $574 billion by 2015,[13] and a study from the World Economic Forum notes that, by 2020, an estimated 150 million new jobs could be created in the ICT sector for young Africans.[14]

Faced with these staggering numbers, the Rockefeller Foundation posed a question: How can we leverage this explosion in the ICT and BPO sectors to employ more disadvantaged but high-potential youth? Part of the answer was to promote broader adoption of socially minded hiring practices across business and government through a field we call "impact sourcing". This kind of innovation creates more opportunities for large multinationals and growing African corporations to employ youth in digital jobs in emerging industries, such as banking, insurance, health care, and mobile technology.

For the last several years, the Rockefeller Foundation has worked to build up the impact sourcing sector in Africa, which seeks to promote equitable growth by employing low-income youth and young people from other marginalized communities in information and communications processing centers. The arrangement has been a win-win: businesses and governments have seen costs decrease by 40 percent, while employees have seen their incomes rise as much as 200 percent.

DIGITAL JOBS AFRICA

The Rockefeller Foundation's nearly $100 million initiative Digital Jobs Africa aims to build on this foundation to eventually impact one million lives through the creation of digital jobs, skills training, and a sustaining ecosystem in which to grow future digital job opportunities.

Creating Sustainable Employment Opportunities

Digital Jobs Africa is working to create new jobs in three ways. The primary pathway for job creation is by continuing to catalyze the impact sourcing sector. We also will leverage the rising demand for skilled workers from African-based companies, governments, and multinational corporations to create sustainable employment opportunities. One particularly intriguing opportunity is the movement of African governments toward e-government systems, which are implementing ICT practices to improve their efficiency, efficacy, and transparency.

In Ghana, for example, we see the potential to create a significant number of jobs by digitizing the immense backlog of government data. However, the real power in creating digital jobs is that it also has a secondary impact: businesses that use this accessible and easy-to-understand government data will be able to provide information and services to the public, thereby creating a cascading series of additional jobs and improved communities. Furthermore, we aren't starting from scratch: IT Enabled Services Secretariat Ghana has already had great success in training young workers to do these jobs. The young employees who participated in the program have shown not only an 80 percent improvement in skills but a 250 percent increase in incomes.[15]

Digital Jobs Africa is exploring additional opportunities to create new digital jobs, whether through the next big development in mobile health or a new business innovation that will require thousands of digitally trained workers. We do not know what these jobs will be, but the characteristics of the ICT space suggest that they will appear and increase in number rapidly. For example, M-PESA Kenya, a pilot project in 2007, now employs over 25,000 agents and has given nearly 20 million Kenyans access to the formal financial system.

Skills Development

To help young people develop the digital skills that will let them land these kinds of jobs, we are working with nongovernmental organizations and other groups to build training programs that will connect disenfranchised populations with income-generating opportunities. By supporting skills development, such as computational thinking, cognitive functioning, and digital media literacy and training for young people, we will help prepare them for digital jobs. We also will support training programs for skills such as transcribing, editing, and app development, to name just a few, that are driven by existing needs and opportunities in the private sector.

However, Digital Jobs Africa is not just an initiative to help young people develop skills for skills' sake; it aims to address the skills gap that is directly linked to Africa's growing digital economy and to stimulate the growth of that sector in order to employ more young people. As such, an important lever for ensuring that disadvantaged youth are employed in ICT jobs is to establish partnerships with employers to guarantee that our workforce training meets their needs. As demonstrated by the recently launched Global Business Coalition for Education, there is an emerging global movement to involve business in education and training that will, among other things, identify good business practices and strengthen the impact of corporate efforts to improve access to education and strengthen learning outcomes.

For example, Kenya's Nairobits training center partners poor youth with employers for practical training in website design and publishing. Ninety percent of these students find employment through Nairobits, while others start their own business or look for other opportunities.[16] As employers continue to face a massive shortage of qualified youth to fill important positions in their rapidly growing businesses, there will be great incentive to create innovative partnerships to address a problem that exists across the public and private sector.

Fostering an Enabling Environment

Finally, Digital Jobs Africa is working to create an environment that will ensure that digital jobs can be created and maintained over the long term. This will require more effective coordination among businesses, training providers, governments, and nonprofits long after philanthropy exits the space. Ultimately, our goal is to work ourselves out of a job and leave behind an environment in which philanthropic intervention is no longer needed.

Measuring Success

The creation of digital jobs not only will benefit the workers who will be employed by the ICT and related sectors, it also has the potential to generate additional income and opportunities for their families, communities, and entire countries.

On the individual level, digital job training will teach young people skills they will be able to apply to a range of jobs over a lifetime, making them more resilient in a dynamic labor force—which is a key reason we have focused on digital jobs. As a result of gaining a secure livelihood, youth employed in digital jobs will provide their family members with economic and social benefits. The young people can use the income from their digital jobs to invest in household and other expenses, such as rent, health care, and school fees. On a community level, this boost to incomes will inject much-needed capital into local economies, thus creating additional job opportunities, such as small-scale food vendors, housekeeping services, construction, and transport.

CHANGING THE MINDSET

While we are focused on six countries in Africa—Egypt, Ghana, Kenya, Morocco, Nigeria, and South Africa—based on their potential and their interest in building their BPO and ICT sectors, we believe this model will be replicable and scalable in other parts of Africa and can serve as a model for other interventions worldwide.

But to change the dynamic, we must first change our mindset, from viewing the youth bulge as a challenge to be solved to seeing it as an opportunity we must harness. Unlocking the talents and ingenuity inherent in today's generation of young people may well create the very innovations that will help solve humanity's most pressing concerns.

No matter the outcome, the moral imperative to act is clear. As Rockefeller Foundation founder John D. Rockefeller Sr. said, "I believe in the dignity of labor, whether with head or hand; that the world owes no man a living but that it owes every man an opportunity to make a living." One hundred years later, those words ring just as true; it is up to us to answer the call.

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Ángel Cabrera and Callie Le Renard

"Go to college, young men and women, go to college!"

"Go West, young man, and grow up with the country." This quote was made popular by 19th-century American newsman and politician Horace Greeley.[1] At a time when the East Coast was plagued by unemployment and economic stagnation, the West offered plenty of land and opportunity to those with ambition and a willingness to work. Two centuries later, the economies of many developed countries are also plagued by unemployment and economic stagnation. Unlike the American West, however, in these countries opportunity is no longer tied to land but to human talent, productivity, and innovation. It is knowledge, not geography, that will make or break an economy—and a young person's economic future. Universities are by no means perfect and clearly are not the only places a person can acquire knowledge. However, although there is much today's universities need to do to respond to society's new demands, they remain the surest, most effective path for most young people who want to pursue a prosperous and impactful career.

In the United States, concerns about the skyrocketing cost of attending college have led to a wave of criticism in the media. With state support dwindling, public universities have swiftly transferred the economic burden of getting an education to the students. At our university, for example, as state tax revenue appropriations per student have declined by more than half over a decade, in-state tuition and fees have more than doubled, even though our expenditures per student have remained almost flat. Other factors driving tuition inflation include investments in facilities and equipment, increases in long-term debt, and growth in administrative and support services. The result, according to a recent study by consulting firm Bain & Company, is that the average American family now has to dedicate 38 percent of its annual income to pay for a year of college, up from 23 percent a decade earlier.[2] As a consequence, students are borrowing more and more to pay for college, and U.S. student loan debt ballooned to nearly $1 trillion in the third quarter of 2012,[3] which for the first time is larger than either credit card or auto loan debt.[4]

These trends have sparked a plethora of arguments against obtaining a college degree. Citing examples like tech giants Mark Zuckerberg, Bill Gates, and the late

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Steve Jobs, many analysts and commentators have tried to make the point that one can achieve meteoric success without graduating from college.[5] Silicon Valley investor Peter Thiel has gone as far as offering a $100,000 grant for high school students interested in creating a company instead of going to college. "You increasingly have people who are graduating from college not being able to get good jobs, [and] moving back home with their parents," Thiel said recently. "I think there's a surprising openness to the idea that something's gone badly wrong and needs to be fixed."[6]

Setting aside the fact that Thiel himself has two degrees from Stanford University and that his generous grant is available to only 20 students per year, the odds of getting a good job remain overwhelmingly higher for people with a college degree than for those without one. Schmitt and Jones found that the odds of getting a good job—defined as one that pays over $37,000 per year and includes employer provided health and retirement benefits—are three times higher for college graduates than for high school graduates who didn't go to college. Most importantly, the gap between them has been widening steadily.[7]

Economists have expressed concern about the decrease in median family income over the past three decades. Our colleague Tyler Cowen has reported that the average American family earned less in 2009 than it did in 1999.[8] Whether this worrisome trend can be explained by economic cycles, by our inability to maintain the pace of innovation (as Cowen himself argues), or by our inability to keep up with innovation, the fact is that not every worker is experiencing this wage stagnation the same way.[9] As it turns out, the availability of jobs has become polarized, with rapid job growth at both the high and low ends of the skill spectrum coming at the expense of middle-skill jobs. Moreover, while low-skill workers are seeing their wages shrink, their highly skilled counterparts are commanding an increasingly larger wage premium.[10]

Clearly, the surest path to economic opportunity for youth is not less education but more. Our discussions, then, should center not on how to bypass college but on how to ensure that more youth around the world can participate and benefit from high-quality higher education; how to ensure that colleges respond to the changing needs and lifestyles of an increasingly diverse population; how colleges can help more young men and women to either do or create a job; and how we can finance the whole learning enterprise in a sustainable way.

In the developed world, student demographics have changed dramatically over the last decade. In the United States, for instance, of the almost 19 million undergraduate students, only 7.3 million are full-time students attending a traditional four-year institution.[11] About the same number (7.2 million) attend a community college, with the balance split between part-time students in four-year institutions (about 2 million) and students in for-profit universities pursuing associate's or bachelor's degrees (almost 2 million). And while bachelor's degrees are still the most commonly awarded credential, certificates have now surpassed master's degrees, comprising 22 percent of the credentials awarded in 2010, compared to 6 percent in 1980.[12]

Traditional four-year institutions are having difficulty serving the evolving needs of this increasingly diverse student population—or at least students seem to be saying so with their feet. Nearly one-third of all U.S. college students transfer institutions at least once before actually earning a degree. Furthermore, more than half of these students transfer from four-year institutions to community colleges.[13] Dual enrollment—taking courses at both a four-year institution and a community college—is also on the rise. More and more students are also enrolling in private for-profit institutions like the University of Phoenix and DeVry University. In fact, private for-profit institutions awarded 19 percent of all associate's degrees and 10 percent of master's degrees in 2010.[14]

As difficult as it will be for traditional American universities to deal with this increased student diversity, it cannot compare to what will be needed in emerging economies around the world. Compared to the advanced economies in the Organization for Economic Co-operation and Development (OECD), where 38 percent of the population between ages 25 and 34 has achieved some tertiary education,[15] in China, only 5 percent have done so. With a current student population of about 30 million students, China would have to increase its capacity to accommodate 200 million students to reach OECD levels. This would amount to building 2,000 new universities with student populations of 100,000 apiece—the size of Arizona State and George Mason universities combined. Given the high costs associated with traditional American research universities, even when adjusted for purchasing power parity, it is clear that new models will be needed to satisfy the massive growth in higher education demand in most of the developing world.

Even though the challenges are not the same around the world, some areas of innovation will prove instrumental everywhere, even if applied in different ways. First among them is online education. After the false start in the late 1990s, when pioneer efforts burst with the rest of the online bubble, online education is finally making major inroads. The vast majority of students at the for-profit University of Phoenix (which, with more than 300,000 students, is America's largest university) take some or all of their courses online. Even traditional universities are seeing significant enrollments in their online programs; Arizona State University, for example, claims over 5,000 online students.

Research has shown that online education, especially when blended with face-to-face interventions, can lead to higher learning effectiveness than traditional methods.[16] In addition, online delivery can be far more scalable than residential models, not only because it doesn't require facilities but because it may utilize alternative faculty models. While online is not necessarily low cost, it does open up a new space for innovation that can potentially bring the marginal cost of delivery down to almost zero. An ambitious project led by Israeli entrepreneur Shai Reshef, the University of the People, is trying to offer tuition-free education to students around the world. While the goal of a completely free education has not been achieved yet, the University of the People is finding ways to dramatically reducing the marginal costs of delivery.

In the last year, there has been an explosion in the number of Massive Open Online Courses, or MOOCs, offered to learners around the world, often at no cost to students. For-profit providers like Coursera and Udacity and nonprofit collaborative partnerships like EdX are bringing courses to the masses, regardless of their educational background or university matriculation. Students around the world can now take free courses in subjects like computer science, mathematics, economics, health, and the social sciences from the best professors at top-tier universities, such as Stanford or MIT, entirely online. As with the University of the People, MOOCs are not completely free to the student, as fees usually apply for exams or certifications, but the costs are minimal compared to traditional instruction. Questions about the viability of MOOCs remain unanswered. Coursera and Udacity still have not found financially sustainable business models, and even the wealthy universities behind EdX will not be able to sustain financial losses forever. It is possible that a combination of advertising, corporate sponsorships and added-value services such as certification, examination or employment services will eventually provide sufficient revenues to keep MOOCs growing. Meanwhile, there are early signs that students will soon be able to earn university credit for these courses.[17]

Another avenue of potentially effective innovation will be collaborative, open-source development. Open source models of innovation have already yielded results, both in terms of content (e.g., Open Courseware Consortium) and technology and support systems (e.g., Moodle and Sakai learning management systems or Jasig and Kuali administrative software). Open source also can play an important role in diffusing innovations from developed to emerging markets, as solutions produced by better established universities become freely available to new, often less endowed institutions that can then become drivers of additional innovation.

On the other end of the spectrum, for-profit enterprises have virtually no limits on raising capital to drive growth and innovation, as long as they produce adequate returns on investment. In the U.S., the University of Phoenix, DeVry, and Grand Canyon University had market capitalizations of over $1 billion at the beginning of 2013. Internationally, privately held Laureate International Universities currently has over 750,000 students around the world, and it could join the billion-dollar club if or when it goes public. For-profits have recently raised regulatory concerns after accusations of abusive recruiting practices, but there is no doubt that they will play a role in satisfying the growing demand for higher education around the world, given the scarcity of public funding.

Because the typical student profile is changing so much, a "one-size-fits-all" approach to higher education will not work. Given how distance education breaks down geographic barriers to competition, it is likely that universities will be forced to develop differentiated models to target specific populations or to offer specific types of education. A good example is the development of so-called competency-based models, which measure student learning outcomes rather than time on task or credit hours.[18] Students at Western Governor University, for example, study on their own at their own pace with the assistance of a tutor, and they take exams designed to assess whether or not they have mastered the competencies associated with the credential they seek. Competency-based education is especially relevant for adult learners who have some college credit and work experience but no degree. These students enter college knowing different things and learning at different rates.[19] Competency-based education also changes the role of faculty, who don't serve as lecturers but as guides, "answering questions, leading discussions, and helping students synthesize and apply knowledge."[20] Competency-based education also will allow for the increased use of technology, as questions can be answered and discussions led online rather than in person, once again accommodating the schedules of adult learners. Taken to the extreme, competency-based education could potentially allow students to personalize their education by collecting "badges" or certificates of competence in various disciplines from different providers.

Other models are seeking to differentiate by creating a tighter connection with employers. One example of this is the development of associate's and bachelor's degrees in Texas that are specific to the energy industry. In 2012, the "Texas Higher Education Coordinating Board granted $1.3 million to five South Texas community colleges to train about 800 workers in oil field jobs."[21] Although many of these changes are happening at community and technical colleges due to their ability to adapt more quickly, changes are also taking place at four-year institutions. For instance, Texas A&M International University in Laredo is seeking approval for a bachelor's degree in petroleum engineering, and the Kingsville campus "will reinstate a bachelor's degree in natural gas engineering," which was discontinued over a decade ago due to a lack of student interest.[22]

This kind of specialization is also happening at the graduate level. As interest in traditional MBA programs has stagnated or declined, many business schools have begun to offer specialized one-year master of science degrees designed to give students just out of college an edge on the job market. These degrees allow students to specialize in traditional fields like accounting and finance, as well as in emerging fields such as information technology, supply-chain management, and data analytics.[23] The programs have appealed to many business students at a time when jobs are both scarce and very competitive.[24]

The changing landscape of employment and careers is also raising interest in programs that prepare students not to do a job but to create one. Programs in entrepreneurship, which until recently were limited to business schools, are beginning to shape the curricula of other disciplines. For example, the CIDA City Campus University in South Africa offers a program to historically disadvantaged youth that has a strong emphasis on business creation.

Higher education has never been so needed. In the knowledge economy, higher education is no longer a luxury, but a necessity for both individuals and their communities to remain competitive. However, traditional universities are not yet prepared to meet the growing demand for higher education around the world and to satisfy the needs of an increasingly diverse student population. Major innovations will be needed to transform existing universities and create new alternative models. It is possible that many of today's universities will not survive, and that others will, but in a new form. It is very likely that the next few years will see new entrants that we cannot even imagine today.

As this process of creative destruction unfolds, no one should draw the dangerously misleading conclusion that higher education is no longer needed. Go to college, young men and women, go to college! Or ignore this advice at your own peril.

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Stanley Litow

Innovating to Strengthen Youth Employment

The financial crisis of 2008 exposed serious weaknesses in the world's economic infrastructure. As a former aide to a mayor of New York and as deputy chancellor of the New York City Public Schools (the largest public school system in the United States), my chief concern—and a significant concern to IBM and other companies interested in global economic stability—has been the impact of global economic forces on youth employment. Across the United States and around the world, youth unemployment is a staggering problem, and one that is difficult to gauge with precision. One factor that makes it difficult to judge accurately is that many members of the youth population have yet to enter the workforce, making it hard to count those who are unable to get jobs. What we do know is that the scope of the problem is overwhelming. Youth unemployment in countries such as Greece and Spain is estimated at over 50 percent, while in the United States the rate may be 20 percent, 30 percent, or higher in some cities and states. Why is this problem so daunting? Why does it persist? And, most important, how can communities, educators, and employers work together to address it?

THE ROOTS OF YOUTH UNEMPLOYMENT

While we can take some solace in the fact that U.S. high school graduation rates are higher than they were 10 or 20 years ago, this good news is tempered by the reality that the high school diploma alone is no longer adequate preparation for a middle-class career. Young people who enter the workforce with only a high school diploma are expected to earn no more than $15 per hour, and many will earn less. The foundation of the problem is that America's school systems—largely controlled by states and local school districts—have not evolved their education models sufficiently to keep pace with the new demands of the global, knowledge-based economy. There is no "silver bullet" in the effort to improve education. Investments in early childhood education, expansions and restructurings of the school day, and

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efforts to improve teacher quality all have been important. But some specific, focused, and targeted efforts directed at high schools are long overdue.

As local, national, and global economies have changed, fewer "living wage" jobs have been created or sustained for those who have only high school diplomas. Today's reality is that young people need postsecondary education (either a two-year or a four-year degree) and the requisite skills to be prepared for the jobs of the 21st century. The high school diploma is now the *first* step toward career readiness—not the last.

We also must focus on the relevance and rigor of America's high school programs. The acid test for the quality of our high school programs is the postsecondary success rate of their graduates, and the statistics are not encouraging. Currently, only 25 percent of young people who possess a high school diploma and register for community college will successfully complete their "two-year" degrees within six years. That means that 75 percent of community college registrants leave without their degrees and enter the competitive global workforce with neither the credentials nor the skills to earn a living wage. In some locales, the failure rate is even greater, as community college graduation rates hover in the single digits. And so the question becomes, why do so many American young people with high school diplomas fail to complete a two-year postsecondary degree?

The acid test for the quality of our high school programs is the postsecondary success rate of their graduates, and the statistics are not encouraging.

An examination of one community college freshman class using IBM data analytics yielded some intriguing insights. Chief among them was that nearly 100 percent of community college freshmen who required two remedial courses—with one of them being math—failed to complete even one postsecondary semester. More than 50 percent of these students dropped out of community college within two months of matriculation. This drives home the point that unless a high school program is academically rigorous—in addition to being economically relevant—it is inadequate preparation for either the demands of postsecondary education or the training required to participate in the 21st-century economy.

WHERE THE JOBS ARE

According to the U.S. Department of Labor, there currently are 29 million "middle-skill" jobs (jobs requiring more than a high school diploma but less than a four-year degree) in this country. The Labor Department expects the economy to create 14 million additional middle-skill jobs over the next 10 years. These reasonably high-paying middle-class jobs will require specific skills and postsecondary credentials. Young people who are able to attain the relevant credentials and skills—and who, in some cases, will go on to get four-year degrees and more—will benefit from an expanding economy in which their services will be in high demand. But those without the requisite training will be left behind in an uncertain world with limited and diminishing prospects.

Let's compare the numbers. As noted earlier, wages for high school-only graduates typically will max out at $15 per hour—often for less than full-time work without overtime, vacation pay, retirement savings, or medical coverage. By contrast, those with postsecondary training in critical areas can expect to occupy middle-skill jobs with starting full-time salaries approximating $40,000 per year and more. Studies show that disciplinary focus can be more important to earnings than the number of years of training. For cities and states struggling with budgetary cutbacks, diminishing tax revenues, and fraying social safety nets, the benefits (calculated in improved tax revenues) of improving high school completion rates, along with the rigor and relevance of those programs, are immediately clear.

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Rigorous and relevant high school programs will result in a growing, wage-earning, tax-paying middle class that will return rich dividends on state and city investments in education. Meanwhile, locales that focus on quantity over quality when it comes to graduating young people from high school with the ability to attain postsecondary skills will remain mired in a world of dwindling opportunity—unable either to attract or retain employers, or maintain their tax base.

INNOVATION IN EDUCATION

We must improve the quality of education and equip high school graduates with the skills they need to obtain the credentials required to participate in the 21st-century economy. Taking steps to evolve and improve education is nothing new. In fact, educational investments and structural changes to meet the needs of changing economies have been made before in U.S. history.

As this country became more urban, the nature of work shifted from farm to factory. With this shift, the basic skills provided of an eighth-grade education (the minimum American educational standard prior to World War II) were no longer enough for a growing and increasingly industrialized nation. After World War II, the United States emerged as a global industrial power and updated its educational standards to keep pace with a new world economy by making high school mandatory. Upgrading the minimum national educational requirement from 8th grade to 12th grade was a game-changing innovation that resulted in more than 50 years of economic growth and middle-class prosperity. Just as influential was the creation of the Servicemen's Readjustment Act of 1944 (the GI Bill), which expanded higher education opportunity to veterans and resulted in a significant increase in the number of Americans with a postsecondary education.

Now, in the second decade of the 21st century, we stand at a similar crossroads with a similar set of requirements and opportunities. It is time for the United States to revise the traditional 9-12 high school model upward into a new andmore rigorous, relevant, and integrated approach that includes grades 9 through 14. This will give every graduate both a high school diploma and the two-year postsecondary training they will need to compete successfully for middle-skill employment in a 21st-century job market that will continue to grow over the next decade. Such an innovation in education is as significant as developing a new product that revolutionizes the marketplace. The grades 9 through 14 model is an innovation that reengineers education at its core as it ushers in a new era in which educators and employers work together to connect training directly to jobs.

PATHWAYS TO PROSPERITY

As part of developing an innovative approach to integrating secondary and postsecondary education with workplace learning to connect training more directly to employment, IBM focused attention on the data that provide growing evidence of a skills gap in the American economy. In our monograph entitled *STEM Pathways to College and Careers Schools: A Development Guide*, we note that many young adults (including those with only high school diplomas, and those who have completed some college) lack the academic knowledge and workplace skills to succeed in the 21st-century economy. As completion rates for four-year colleges improve, undereducated young people are subjected to downward market pressures as they are replaced by college graduates (or those who have completed some college) and pushed out of the middle class.

Mobility Makers, the 2011 study by the Center for an Urban Future, indicates that, even though young people understand the need to acquire skills and education to qualify for jobs in today's global economy, a stunningly high percentage of them still fail to finish their college degree. The two most significant factors driving down college completion rates are inadequate academic preparation and lack of guidance and support.

These low graduation rates come with substantial financial implications for students and taxpayers alike. For example, the study indicates that each community college dropout costs New York City more than $17,000 in federal, state, and city aid and funding. Furthermore, those without college degrees typically earn 85 percent less than their college-educated peers over a lifetime. The study concludes that a mere 10 percent increase in community college graduation rates in New York City would increase earnings for that graduating class by $631 million in the first year alone, and by $3.4 billion over a 30-year career—with profound implications for the city's tax base.

Meanwhile, the 2011 *Pathways to Prosperity* report by researchers at the Harvard Graduate School of Education advances the thesis that American schools have been too restrictive in their homogeneous approach to preparing *all* graduates to attend four-year colleges. The authors write that "preparing for college and preparing for a career should not be mutually exclusive options." This is because 60 percent of Americans do not earn a four-year degree by their middle twenties, and more than 70 percent of two-year college students in large cities fail to earn their degrees even after three years. With half of new middle-skill jobs over the next 10 years expected to require a two-year college degree, America's low degree-completion rates represent a huge missed opportunity to reduce youth unemployment.

The grade 9 through 14 model is an innovation that reengineers education at its core as it ushers in a new era in which educators and employers work together to connect training directly to jobs.

To help bridge the gap between where we are and where we need to be, IBM partnered with the New York City Department of Education, the City University of New York, and the New York City College of Technology on the Pathways in Technology Early College High School (P-TECH). New York City plans to expand the P-TECH model over the next several years. The model has already been replicated in Chicago and is spreading throughout New York state under the leadership of Governor Andrew Cuomo, who has announced plans to create new P-TECH schools in each of the state's 10 economic development districts.

This innovative approach to connecting education to jobs is a three-way collaboration among a school system, a community college, and a corporate partner. Workplace skills such as knowledge acquisition, teaming, problem-solving, and verbal and writing skills are embedded in the curriculum. Courses use project-based learning to enable students to work in teams, solve problems, create business plans, and learn presentation skills. Structured workplace visits to a P-TECH model school's corporate partner are part of the academic program. In addition, every student has a mentor from his or her school's corporate partner and has the chance to visit a workplace, learn through an internship, and take regular college courses (not high school advanced placement courses) as early as the 10th grade.

This is not to say that we don't incorporate innovative uses of technology into the P-TECH model. First of all, to enhance the value of the mentor/protégé relationship, we developed the MentorPlace website to make mentor activities more substantive and more connected to academic standards and learning goals. We also created a site called Teachers TryScience, which provides educators with access to the best science lesson plans, videos of board-certified teachers teaching them, and collaborative tools to allow teachers to assist each other in incorporating science into the classroom in exciting ways. Finally, to assist students who have lower reading skills, IBM researchers used voice-recognition technology (pioneered by IBM Research) to develop a learning tool that helps address reading deficiencies. These tools are available to P-TECH-model schools, to other schools that work with IBM, and to NGOs engaged in literacy education. That said, the key to the P-TECH strategy is not a piece of technology or a software tool. Rather, the true innovation of the P-TECH model is the integrated six-year program that creates a clear pathway from school to career via curriculum restructuring and the addition of two years of instruction.

The results have been impressive. In these public, non-charter, open-admissions schools serving culturally and economically diverse populations, academic achievement and attendance have been exceptionally high. If this model were broadly replicated under existing Carl D. Perkins Vocational and Technical Education Act funding, hundreds of thousands of young people could benefit from the increased opportunities to participate more fully in a growing middle-class economy. The results for these young adults, their families, and their communities would include shrinking unemployment levels, along with a growing and stable tax base.

The prospects for a long-term and sustainable "return on investment" in our young peoples' education have never been more promising. In his February 2013 State of the Union Address, President Obama stated that every student should be given the P-TECH opportunity: to be motivated, to learn, and to apply their skills in a meaningful and rewarding career. In response, the U.S. Department of Education and other key federal government entities are developing plans to build on P-TECH's success, and to offer the program to many more students.

WHERE WE SHOULD START

More than $1 billion in funding for innovation in American education already exists under the Perkins Act, but our funds-deployment protocol—which largely follows population-based formulas, with few demands for metrics or accountability—needs to be restructured to incorporate three critical components:

- There must be a clear requirement that career and technical education (CTE) is connected to labor market data so that graduates are prepared for present and future jobs.
- CTE programs must be structured as public-private partnerships between educators and employers to ensure that curricula are both academically rigorous and economically relevant.
- Community colleges and four-year institutions must be included in the design and implementation of CTE programs as part of a concerted effort to prepare young people for careers. In addition to restructuring their curricula, postsecondary institutions must help reshape work opportunity programs such as Federal Work Study so that students can gain relevant workplace experience

(versus cafeteria or library jobs unrelated to career preparation) during their academic training—essentially offering an American version of the successful European apprenticeship model.

Together, the Carl D. Perkins and Federal Work Study programs provide more than $2 billion in support to states, districts, and schools for education and training. We need to be much smarter about how we allocate these resources to states and localities, and we must insist on accountability for performance. Repurposing existing funding to support broad replication of the P-TECH model could go a long way toward reducing youth unemployment; reenergizing communities with new hopes, new growth, and new tax revenues; and reinforcing America's ability to compete on the global economic stage. By adopting true innovation that affects both how and what we teach—and ensuring that our young people receive education that is both academically rigorous and relevant to the demands of the global marketplace—we can close the "skills gap" in our economy, overcome the challenges of youth unemployment, and reap the economic benefits for decades to come.

Carl Schramm

University Entrepreneurship May Be Failing Its Market Test

One of the abiding ironies of business education is the now decades-old teaching of industry "best practices" to improve the performance of any organization, including how to improve the innovative capacity of a profit-seeking firm. For the uninitiated, this concept is as simple as its name suggests. To improve your company's performance, you look for the organization that does something better than everyone else and then copy it. If Procter & Gamble runs its packing line better than you do, by all means, copy its practice.

Such thinking may be a reason we are concerned about the slowing rate of innovation in America. If today's best practice is the standard for emulating, do any firms feel comfortable out on some "better than best" frontier? The very notion of "best practices" suggests the acceptance of a grand average. Except, of course, for those firms that are deemed the best practitioners of "innovation." In a recent book, *Inside Real Innovation,* Gene Fitzgerald and Andreas Wankerl and I argue that most older and larger firms forget how to innovate,[1] a finding suggested long ago by Max Weber.[2]

Perhaps this is why we have, over the last three decades, intuitively embraced entrepreneurship as a way to bring more innovation to our economy. Indeed, as I have detailed elsewhere, it was the resurgence of entrepreneurial capitalism in the 1980s that got us out of the prolonged recession that characterized the Carter years.[3]

But the word "entrepreneurship" is beginning to sound a little like the concept of best practices—a phrase that is valued for its inchoate sense of being logical and a self-evidently valuable pursuit. What we mean when we speak of entrepreneurship appears to evade definition. Of course, entrepreneurship is connected to creating new profit-seeking firms. That's what might be called the conventional or

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"economic" meaning. But common usage permits non-profits to claim that they are entrepreneurial (indeed, many college students want to be "social entrepreneurs"); faculty members doing research self-proclaim that they are "intellectual entrepreneurs," and, my favorite, "bureaucratic entrepreneurs," is a classification for innovative public employees thinking up new programs that cost taxpayers more money.

The risk in all this is that when everything is entrepreneurial perhaps nothing is. Is it time to speak with a new term? Maybe those who undertake the risks of starting a new for-profit company are really in the business of "firm formation."

The risk in all this is that when everything is entrepreneurial perhaps nothing is. Is it time to speak with a new term? Maybe those who undertake the risks of starting a new for-profit company are really in the business of "firm formation." After all, as Daniel Spulber suggests, real entrepreneurs know the special skill of objectifying an idea into the productive realm of commerce.[4] They can bring forth a new concept in a manner so concrete that it can be tested in a market context — people will pay for it in a pecuniary exchange? The business of firm formation is not for scaredy cats. There is no gloss of higher motive that many social entrepreneurs implicitly seek as they go about seeking donative funding—a market test of an entirely different nature.

The promiscuous use of the terms "entrepreneur" and "entrepreneurship" in the face of unsettled questions relating to the critical experience of creating new firms seems hardly to bother experts who are absolutely certain that they know just how to teach people to start them. Among this population are government policymakers, venture and angel investors, a plethora of mentor/investors who run new business "incubators" all over the country, and many academics who profess with certainty how the process unfolds as if starting a businesses yields to a prescribed and predictable path.

The typical university course introducing students to entrepreneurship is taught as if it were a settled, path-specific process, one that might parallel a surgeon's knowledge of how best to resect an appendix. In fact, there really is no settled knowledge of how firms are formed and become successful and achieve what Robert Litan and I call "scale growth."[5] Notwithstanding the fact that at least six thousand professors teach and do research in the field, there is no fully developed canon of actionable insight.

A process that is essentially creative should be considered in, say, the model of how we teach musical composition. It cannot be done apart from writing music. Entrepreneurship just does not yield to being a static body of knowledge. To know it and to teach it requires engaging in practice. Entrepreneurship must be taught much as medicine is taught, in a clinical setting. The academic places where the creation of new businesses appears to happen with ease and great frequency are engineering schools, where the invention of companies to exploit ideas emerging from basic research strongly suggests the logic of a practice-based approach. Engineering professors involved in new businesses have often done it before. While many professors of entrepreneurship have never attempted to start a firm!

Discontent with the prevailing academic approach to understanding firm formation and seeking to build more effective ways to recruit and support talented entrepreneurs, a large amount of *practical* innovation is emerging all over the country focused on increasing the number of new firms being formed. (It is a good thing too as business starts have fallen precipitously in the last three years.[6]) Perhaps the most interesting university-based programs attempting to birth an alternative model to the prevailing classroom-incubator model is the University of Miami's Launch Pad. A non-academic effort, it is a child of the realities of the current labor market that many graduates confront. Located in the placement office (not the business school), this program supports students as they invent companies against a standard not of business plan competitions but of whether they will provide a living for the about-to-be graduate. Happily, with support from the Blackstone Foundation, the program is spreading to other campuses.

Stanford and Berkeley are exploring some fundamental theories of how new businesses might be conceptualized. A shared adjunct, Steve Blank has extensive personal experience as a successful entrepreneur that drove him to search for a better conceptual frame of what a new firm is and does. His articulation of the firm as a social/economic entity formed to search for scale opportunity has helped crystalize a new way to help students along. His insight has largely knocked out the core of introductory entrepreneurship courses, the writing of a formal business plan. In its stead, as is emerging at the University of Virginia, are competitions that test actual ideas in market situations, not essays about would-be businesses.

Outside the collegiate world, interesting new approaches to helping students get familiar with business formation are emerging. None has experienced the market ratification of Start Up Weekend, a 54-hour program in which participants actually make new businesses. Entirely experiential and often sponsored by universities in off-campus venues, this year's weekend events will be held in nearly 500 American locations and in over 50 countries. Of course, Peter Thiel's well-known prize for dropping out of college to start a business under his tutelage has gathered both attention and predictable condemnation. Either way, it is an attempt at an alternative model of teaching and, in some way, a means of forming a considered life. Similarly, Jeff Sandefer's invention of Acton Business School, an intentionally non accredited but course-based program that makes the creation of a successful business the focus of graduating, is premised on entrepreneurship as a vocation decidedly infused with moral content and meaning. No student starts in this program without knowing that, to come out, a new business must be in hand.

A different approach to evolving practical training is well underway in several formal experiments in recruiting and supporting entrepreneurs as they develop businesses in what might be thought of as hothouse environments. Perhaps the one with the widest reach is TechStars, founded by a serial entrepreneur, Brad Feld, who, like Sandefer, became interested in improving the chances of new firms by developing better ways of providing practical support and advice. TechStars selects groups of potential entrepreneurs from a highly competitive pool. To increase what might be thought of as the traction of the experience, successful entrants to the program are promised $118,000 in seed funding to support a new business, if they can develop an idea judged to have the potential to grow. Participants have ready access to seasoned founders as well as venture capital and angel funders who are part of what might be legitimately called a credentialed mentor system.

The reality of which we must all be mindful is that we are at the very beginning of understanding in any systematized way just who entrepreneurs are, how they create successful new start-ups, and how they grow them to scale. This is a critical intellectual pursuit.

Of course, there are other efforts to recruit and to help entrepreneurs along. One celebrated example is Y-Combinator. This organization, which has helped over 700 new firms, tends to look more like older and somewhat smaller models created by venture capital firms 20 years ago. The older generation was birthed to provide venture capital firms unique investment opportunities, usually one or two at a time. These organizations consciously seek to be places in which new insights can be gathered as to how newly formed firms might be brought along. In fact, it is in the later examples, TechStars and venture-backed accelerators, with their particular focus on achieving scale, where some of the most important evidence might be accumulating.

In some ways, what is emerging is a Janus-faced system of building insight into the way in which entrepreneurs form successful firms. The preponderance of the formalized literature, the basis for curriculum in university course work, reflects qualitative studies of individual companies. It is not clear that this approach to assembling knowledge can actually lead to systemic insight critical to increasing the number of firms that become successful and achieve scale growth. If this approach had produced a body of such actionable insight, it might be argued that it is unlikely there would be such an apparent need for new institutional experiments in practical ways to start companies. At the very least, the new organizational structures such as Start Up Weekend and TechStars cannot be said to have descended from a need first identified in academic research.

Happily, many of the newly emerging institutional structures aimed at helping firm formation proceed profess a strong interest in establishing empirical bases for improving their efficiency and effectiveness as organizations. Their intellectual curiosity is linked, of course, to having more new companies in which to invest. (Before there is too much tut-tutting, it should be understood that many universities have captive venture funds in place to pursue just such ends.) From the perspective of a national entrepreneurial ecosystem, all this activity is mostly very good. While there are confused motives in many instances, if in the end, by respectful watching of each other's experience and results, the academic and the institutional experimenters will be able to tell us more that will help new companies succeed in higher numbers from the day of their formation onwards, we will all be better off.

The reality of which we must all be mindful is that we are at the very beginning of understanding in any systematized way just who entrepreneurs are, how they create successful new start-ups, and how they grow them to scale. This is a critical intellectual pursuit. Starting a new firm is the beginning of the never-ending process of renewing or refreshing economic activity. New firms hurry innovation, create all the net new jobs in our economy, and generate all the new marginal wealth so necessary for the expansion of human welfare. We are many years from having an actionable thesis leading to policy that will produce more of them. In fact, the tension between the incumbent knowledge producers (universities) and the new institutional firms that exist to help bring new companies into being and develop a new corpus of knowledge might be seen as part of the larger economic dynamic. Mao Zedong, hardly an epigrapher to be admired by those committed to entrepreneurial capitalism, did offer one admonition of use, namely, "Let a thousand flowers bloom." Entrepreneurship can be made better if all appreciate the importance of building a core of actionable insights that will help real people to pursue lives of real value in newly formed businesses.

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Jacob Korenblum

Frustration, Fearlessness, and Fortune
How Youth-Led Startups Are Redefining Entrepreneurship

In 2005, armed with two years of college Arabic and a vague employment contract, I tumbled out of a taxi and onto the main street of Ramallah, Palestine. The region was anything but stable. Six months after my arrival, Hamas won its first elections and came to rule the West Bank; roughly 18 months after that, the party was ousted in a series of bloody clashes and retreated to Gaza. Meanwhile, the Israeli military occupation of both areas continued unchecked, as it had for close to 40 years.

Against this backdrop, my employer, a U.S.-based aid agency, was focused on a unique set of priorities: holding focus groups with young Palestinians to hear their views on youth economic opportunity and entrepreneurship, and to ask what we (as international interlopers) could do to help boost economic growth in the country. While we moved from town to town, chatting with group after group of earnest youth, two things happened. First, I got bored by the two-hour meetings. Second, I noticed that everyone everywhere had a cell phone and that they were using them constantly to send text messages to each other—hardly an earth-shattering observation in 2013. However, close to 10 years ago, only half the population in my own home country, Canada, owned a cell phone, and at the time most people didn't see it as a vital device.

As the weeks passed, my frustration with the tried-and-true focus group approach mounted. At first I was too timid to speak out (this was, more or less, the first real job I'd ever held and I considered myself lucky to have it). Ultimately, though, I ended up spending any spare moment I could sketching out text-message sequences with some friends. As we started to build a team and a concept, we mustered up the courage to leave our day jobs and focus on the idea full time. And while some criticized us for "having it too easy" or "having all the luck in the world" by being able to work on our own clock without a boss or a 9-to-5 schedule, we were simply thankful to have a window of uninterrupted time to try out something new. Unbeknownst to us, we were about to come up with a mobile solu-

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tion that would help thousands of people find work more easily: linking job seekers with local employers via text message.

Fast-forward seven years, and Souktel—as our mobile job service came to be known—has been fortunate to help youth in 21 countries, to be profiled in the *Wall Street Journal*, and to raise venture funding from a group of investors that includes household names like Google and Cisco. Through a process that's low-cost and easy to understand, the service has allowed thousands of job-seekers with basic cell phones to create text-, audio-, or web-based "mini-CVs"—with information about their skills and work experience. These profiles are then auto-matched with jobs that are listed by employers through a similar process, and both sets of users get SMS alerts with the other's contact details. Now that we've reached scale, we frequently are asked the same question by aspiring startups and high-level decisionmakers: What's the secret to building a successful youth enterprise?

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Naturally there's no simple answer, but I usually respond the same way each time I'm asked: from our experience, as a group of Palestinians, Canadians, and Americans, we've achieved success by taking the very concepts that often are used to define youth negatively—especially in the Arab world—and inverting them to achieve positive aims. To be specific, we believe that the path to successful youth entrepreneurship is defined by three key factors: frustration, fearlessness, and fortune—and by "fortune," I mean luck; the money, if it comes, is seldom in the picture at the beginning.

Young entrepreneurs are frustrated. We're never content with the status quo and are always seeking to combat what we see as inefficiencies in the world around us: Why should I call several taxi companies to hail a cab when a single app could let me find a car that's down the street? Why walk miles to charge my phone when a solar device lets me do it at home? In each of these cases (and there are hundreds if not thousands of them), "productive frustration" has led to the birth of productive youth-led enterprises. Where Souktel is concerned, it was our dissatisfaction with traditional ways of solving youth unemployment that led us to become bored, frustrated, and eventually innovative.

However, in much of the Arab and Muslim world, “youth” and “frustration” are often uttered in the same breath but with much less positive associations. “Are Frustrated, Idle Youth in Somalia a Threat to the World?” asks a September 2012 Reuters headline. “Riots in Stockholm Continue as Youth Vent Frustrations,” read a headline in Germany’s *Der Spiegel* this past May. While policy experts and decisionmakers unveil new initiatives aimed at helping youth realize their potential, the media—a much more powerful amplifier—conflates young people and their frustration with danger and the destruction of property. Of course this isn’t always the case and not all media follow this line, but rare is the time I’ve read a headline that proclaims, “Youth Channel Frustration to Build New Social Venture.” My point here is that I believe we can do a great deal to help young people in Egypt or Indonesia to harness their frustrations to positive goals instead of castigating youth for being fed up with their surroundings.

Beyond being frustrated, successful young entrepreneurs are also fearless. We don’t take “no” for an answer, and we don’t balk at risk. In my first few weeks in Palestine, I slept on the floor of my bedroom, away from the window, as tracer fire lit up the valley below our apartment building each night. As a Canadian, this was a shocking new reality; for my young Palestinian colleagues, this was daily life—and had been for decades. But life in a conflict zone also had taught our team members from the region not to sweat the small stuff. If our prototype failed the day before an important pitch, they weren’t phased by it. If our servers went down for an hour, we all worked quickly to figure out where the problem lay, but without getting scared. This may sound like an opportunistic corollary to connect the dots between fearlessness under fire (literally) and fearlessness in the face of startup market pressures, but I firmly believe that our experience cutting our teeth in Palestine during some of the region’s more difficult recent moments (the 2006 Lebanon war and the 2008 invasion of Gaza, among others) has helped us put our startup challenges into perspective and enabled us to forge ahead more boldly with our entrepreneurial plans.

During the 2011 London riots, a *Guardian* piece entitled “Who Are the Rioters?” followed a group of young women and men as they torched vehicles and vandalized shops. Characterized mainly by their brazenness and lack of trepidation in the face of local law enforcement, these youth were every adult’s worst nightmare: “She helped set a motorbike alight, walking away with her hands aloft,” wrote correspondents Paul Lewis and James Harkin of one girl’s exploits, thus painting a vivid picture of daring triumphalism in the midst of utter anarchy. In our first-ever “elevator pitch,” at the Harvard Business School’s Business Plan Competition, we had literally four minutes to extoll the virtues of our new, as-yet-untested technology. We swallowed hard, and walked away with our hands aloft as well; not only had we unwittingly harnessed fearlessness and used it to our advantage, we’d scored a runner-up finish in the social venture category. There is a world of difference between these examples, of course: Harvard is by no means a London public housing estate. But I present this contrast, and commonality, deliberately: Each year a handful of Palestinians, many from rural villages, journey to Harvard and MIT on full scholarships. With the right support in place, this trickle could turn into a flood, and young people in Cairo or Tunis could be channeling their fearlessness, en masse, from the streets to the executive boardrooms of venture capital firms in New York or Silicon Valley. Precedents are already being set in this regard. Initiatives like the MasterCard Foundation's half-billion-dollar Scholars Program fund African youth leaders to study at Stanford, Berkeley, and a wide range of top schools across Africa and North America.

Beyond frustration and fearlessness, young entrepreneurs are ultimately blessed with good fortune. Of course, a large part of Souktel's success is due to the hard work and tremendous skill of our team. But to a certain extent, we were simply lucky. We took a gamble that mobile phones would become the "next big thing" in youth financial inclusion when local employers, international donors, and the general public still maintained that texting "LOL" was the main purpose of a mobile handset. Even armed with reams of market research, we had no way of knowing that our innovation would eventually take off and reach scale. As hard as we've worked to achieve our venture's growth, we're also innately aware that factors beyond our control helped us get where we are.

Souktel was once approached by an American venture capital fund that had developed a unique algorithm: by drawing on "big data" from the entrepreneurship sector and applying computer-generated screening criteria, the formula could weed out less promising enterprises and hone in on winning ideas, thus creating a foolproof funding portfolio. The fund was interested in our work, we were intrigued, and we agreed to move ahead with them in the hope that we might squeeze through the magic filter and be deemed a successful youth enterprise. Soon after, though, we were told that we didn't qualify as a potential investee, as our funding history didn't generate enough data points for the software to analyze. Nonetheless, at roughly the same time, we wrapped up a lengthy—and, in contrast, very traditional—due diligence process with a Middle East-focused fund that counted eBay's Jeff Skoll and Google.org as its backers, and we received $1 million in financing. Meanwhile, closer scrutiny of the "algorithm fund's" portfolio showed that, by its cofounder's own admission in a 2012 article, "it is too early to report successes or failures" among the 20-plus startups it had thus far funded through its model.

My point here is that we can all look for best practices in youth entrepreneurship—and this is not to say that correlative trends don't exist—but, from our experience, many successful enterprises are successful not because they conform to certain criteria, but because to a large extent they're lucky to sprout in the right place at the right time. Would-be entrepreneurs and the funders who support them must be aware of this reality; venture capital funds and foundations expend tremendous resources trying to define the key traits of an entrepreneur, or the "secret sauce" of entrepreneurship, but with limited results. At the same time, youth across the developing world are often derided by their elders for having all the privileges of society and none of the responsibilities—or for sitting idle and abusing the good fortune that has resulted from their parents' hard work. "Wayward youth" has been a North American catchphrase for decades. The challenge for all of us in the youth entrepreneurship community—decisionmakers, funders, and plucky startups—is to leverage this good fortune when it happens rather than criticising it. We then need to move quickly to provide the kind of strategic support that lets innovative youth enterprises move from startup to scale.

Frustration and fearlessness, when strengthened by good fortune, can yield incredible results: Otlob in Egypt and Digital Mania Studio in Tunisia are just two examples of youth-led ventures that have achieved market success since the Arab Spring. And while conflict continues in Palestine and nearby Syria—and these harsh realities must never be overlooked—I firmly believe that we are currently in a period of good fortune in the Arab World, at least where youth entrepreneurship is concerned. Ten years ago, few would have imagined that Nablus in the Northern West Bank, hemmed in by Israeli military checkpoints for years, would host an offshoot of the global Startup Weekend venture contest, sponsored by Microsoft and Amazon (among others), where aspiring entrepreneurs would be mentored by team members from Souktel and other local tech ventures before pitching their ideas to a panel of judges. Fewer still would have dreamed that that the Gaza Strip would be home to Google-supported app developer meetups. The rapid growth of affordable technologies—especially mobile tech—and the power of these technologies to connect youth with financial services and entrepreneurship support means that more young people than ever before are able to turn entrepreneurial dreams into reality. As a global community, we must now become experts at recognizing frustration and fearlessness as catalysts for positive change and stand ready to spring into action when the right mix of frustration, fearlessness, and fortune presents itself.

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Life as an entrepreneur is never easy; life as a young entrepreneur in the Middle East, or any other emerging market, is dramatically more difficult. The challenges that constrain youth enterprise—access to education, access to capital, and dynamic institutions, among others—will likely persist, even as the technologies that help connect youth become cheaper and more widespread. At Souktel, we're constantly working to stay two steps ahead of the curve, to provide value to the communities that use our services, and to stand tall as ambassadors and mentors for aspiring young businessmen and women across the Arab World. This year we're launching new job services in Iraq and Egypt while growing our team and releasing new products—all at the same time. Every day is difficult, but no day is ever boring; the realities of being young people living and working in our region keep us energized and entrepreneurial.

Martin Burt

The "Poverty Stoplight" Approach to Eliminating Multidimensional Poverty

Business, Civil Society, and Government Working Together in Paraguay

Innovations Case Narrative:
Fundación Paraguaya

Over the past few years, my team at Fundación Paraguaya (a 28-year-old nonprofit development organization that works in Latin America and Africa) and I have been developing a practical methodology and tool that allows poor families to self-diagnose their level of poverty as a first step in developing a personalized strategy to lift themselves permanently out of poverty. We call it the "Poverty Stoplight" approach to eliminating multidimensional poverty. Our tool uses stoplight colors (i.e., red, yellow, green), photographs, maps, electronic tablets, and simple software to create innovative maps that enable the poor to see and understand the ways in which they are poor. The methodology and tool also allow businesses, nonprofits, and governments to support families' efforts to pull themselves out of poverty in efficient, targeted ways. Our 20-minute visual survey methodology simplifies gathering data on poor families while encouraging and facilitating a focus on the gaps these families need to close to overcome their various poverty-related challenges. Not only the poor stand to benefit from this social innovation; governments and other actors in the field, such as businesses and social-minded software developers, can benefit as well. This tool also can be useful and cost effective for microfinance institutions that are in the business of fighting poverty but often find it difficult to address the chronic social problems affecting their clients.

EPIPHANY

In December 2008, right after the evening graduation ceremony held at our self-sufficient agricultural high school in rural Paraguay, I witnessed an event that would change the way I thought about development and social change. On the

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school patio, under the mango trees and surrounded by classrooms and dorms, the 50 students had, on their own initiative, set up a gala dinner: 50 tables were covered with white cloths and set with wine glasses, silverware, and plates for the main course and bread. Led by valedictorian Liz Marina Gonzalez, the students, their parents, and their guests promenaded out of the chapel where the graduates had received their high school diplomas, while the master of ceremonies asked the public to sit at designated tables. As the afternoon gave way to a pleasant summer evening, the recently graduated students appeared wearing dark suits and long dresses. The loudspeakers began playing a waltz, and the students walked to their parents and invited them to dance.

As strains of "The Blue Danube" waltz surrounded us, I couldn't help but think how far these students had come. Most of them had arrived at our school essentially barefoot and hungry merely three years earlier, cashless and owning only the clothes on their backs. Most had barely finished ninth grade in a precarious rural school. Now they were performing ("mimicking" is probably a better word) a typical middle-class tradition in Paraguay, turning a graduation celebration into a prom. Of course, no one on the floor that evening—neither the students nor their parents—had ever participated in such an event before. Most likely they had seen something similar on Paraguayan TV or in the Sunday paper.

But there they all were, dancing in formal dress. Liz Marina, who graduated first in her class and would become first a teacher at the Curuguaty Agricultural School and then an agricultural extension agent for the Ministry of Agriculture and Livestock, danced with her father. Maricel Merlo, who had arrived penniless three years earlier from the San Pedro region and would become a microfinance and "village bank" microcredit advisor after graduation, danced with her brother. Sebastian Escobar, a member of the indigenous Enxlet tribe, who would return to his community and develop his family's farm, danced with his mother.

These were a group of extraordinary achievers born to poor farmers. If there is one precondition to being poor in a country like Paraguay, it is to be born a *campesino,* or rural peasant. Being an adolescent girl or a member of a native indigenous community practically ensures this outcome. And yet, these young people had overcome the odds and were off to a promising future. I was reminded of a TED talk in which Sir Ken Robinson explained that, for people to learn most effectively, they need to be in their own element—in the place where a person's natural talent intersects with their passion.

Standing in awe at this most unusual event, I had a flashback and a moment of clarity. I was reminded that, a few years earlier, Lourdes Aguero, one of our microfinance loan officers working in an extremely poor urban slum near Asunción, had told me that women participating in our village bank program were developing unexpected extracurricular activities. "One group holds tea parties every month," she told me, "and the 15 women members of the group lock themselves in a house, dress up, and parade in a fashion contest among themselves. They award themselves prizes for best smile and best dressed and most sophisticated." I remember that I had laughed at Lourdes when she told me this. Now, watching these extremely poor adolescent rural girls and boys acting as if they were middle- or upper-class Paraguayan professionals, I felt I was witnessing their need and desire to transcend one economic and social class and rise to another.

Despite any opinions I had about bourgeois activities such as teas, debutante balls, and waltzing, I was forced to see that many poor deeply aspire to become middle class. I also began to understand that many poor must first *believe* they can move into the middle class before they can accomplish it.

That was my epiphany, my moment of clarity—that people could move out of poverty when they began behaving as if they were not poor. I felt that what was needed was not so much understanding of the culture and standards of poverty but of "nonpoverty." We needed to contrast poverty with nonpoverty and then take action to address the difference. We needed to understand that the poor could be motivated to pull themselves out of poverty. Once we had this clear, all we had to do was look for a tool. The Poverty Stoplight approach would prove to be that tool.

BACKGROUND

As a Paraguayan who has dedicated his professional career to "cracking the code" on how to eliminate poverty in his home country, I always had been frustrated by the difficulty of grasping the various, and often contradictory, solutions to poverty offered by different schools of thought in the development field. Is it possible, I wondered, to combine apparently different strategies? On the one hand, economic growth helps reduce poverty, but it generally does not extend to the invisible, hard-to-reach extreme poor. Unmotivated and unskilled people find it difficult to hitch their wagons to the engine of economic growth. On the other hand, government handouts and welfare programs provide a needed safety net for many vulnerable families but they can create perverse incentives that appear to destroy economic self-reliance. In addition, waste, corruption, and political cronyism appear to be the unavoidable consequences of large conditional cash-transfer programs, at least in my country.

In Paraguay, social unrest and political tension will continue to plague rural areas unless new formulas are found to address extreme poverty and massive rural-urban migration. Our economy is booming, thanks to growth in the export of commodities such as soybeans, beef, and corn. With a population of just 6.6 million, the country produces enough food to feed 47 million people.[1] And yet, 32 percent of the population live below the official poverty line and 18 percent go hungry; that is, they cannot afford enough food to provide each person with 2,500 calories per day, a measure that defines extreme poverty. As of 2013, some 205,000 Paraguayan families live in extreme poverty. But thankfully, consensus is emerging that, if the private sector and government are to enjoy a future of peaceful prosperity, business as usual must end: government, business, the nonprofit sector, and the poor themselves must work together to bring these families permanently out of poverty.

As Paraguay prepares itself for a prosperous future, the business community, social organizations, and the government are coming to an agreement that new methodologies and technologies are needed to address seemingly intractable poverty issues. The Poverty Stoplight approach is such a tool. Our tool uses cheap, easily available technology to help people understand complex poverty problems, to simplify previously cumbersome processes, and to implement effective poverty-elimination strategies. With mobile technology available to practically everyone in the world today, we feel that the solution to extreme poverty may be at hand.

EVOLUTION FROM SELF-SUFFICIENT MICROFINANCE TO SELF-SUFFICIENT SCHOOLS FOR THE POOR

In 1985, a group of local business and civil society leaders, my friends Steve Gross and Bill Burrus from Accion International, and I started Fundación Paraguaya, Paraguay's first microenterprise development program.[2] We set out to provide loans and training to help poor people working in the informal sector of the economy achieve three things: increased family income, strengthening of their precarious jobs, and the creation of new jobs for others. We measured our impact and found that, on average, for every person we supported we created 1.3 jobs per year. Providing working capital freed our clients from having to depend on loan sharks, and that this, too, had a positive effect on their income. While some of our clients grew to become small businesses and "graduated" to the formal banking sector, many others stayed behind and either became resigned to, or could not overcome, the poverty in which they lived. We considered this unfortunate, but we came to believe that there was little or nothing we could do about it. Maybe, we pessimistically thought, there are people in this world who, by virtue of their culture and/or lack of proper nutrition, are destined to be stuck in poverty forever.

Like similar programs in Latin America, Fundación Paraguaya dedicated its first five years to reaching its break-even point and thus achieving financial self-sufficiency. At the time, the fact that a development program could pay for itself with the interest derived from $100 loans was a huge paradigm shift in the world of development. To achieve this financial self-sufficiency, which was a significant social innovation at the time, most microfinance organizations like ours opted for a minimalist strategy—access to credit—rather than the integrated strategy of rural and urban development programs that were generally floundering throughout the region. The latter was considered time-consuming, inefficient, impractical, and frustratingly ineffective, and, at the time, governments all over Latin America were beginning to abandon these complex approaches and opt for simpler, pointed, short-term projects.

Our strategy at Fundación Paraguaya was to concentrate solely on providing financial services and let the client take care of the rest. The idea was that clients would increase their family income and then be able to pay for their educational, housing, and health needs. As part of this process, we dropped education and training for our microcredit clients. Business management training was expensive and time-consuming, and it was difficult to assess its effectiveness. As long as clients were repaying their loans, we considered their knowledge and skills sufficient to manage their microbusinesses.

Not completely happy with our minimalist approach and feeling that if we invested in education we might enable the next generation of Paraguayans to overcome poverty, Fundación Paraguaya brought Junior Achievement's financial literacy programs to Paraguay in 1995 as a complement to our microloan programs. Thanks to two local college students, Pancho Peroni and Yan Speranza, we were introduced to this nonprofit that had developed a methodology that brought trained volunteers to the classroom to deliver a hands-on entrepreneurship curriculum. These extracurricular elementary and high school programs proved to be extremely popular, and we partnered with business leaders to reach hundreds of schools throughout the country. Through a cross-subsidization strategy, we used the income obtained from business-sector sponsors who wanted to support Junior Achievement in private schools in the capital city to pay for introducing the same programs in the poorer public schools that our clients' children attended. In this way, we were able to train thousands of poor students to write business plans and set up for-profit microbusinesses. The press, parents, educators, and the students themselves loved these programs, which provided a much-needed complement to the otherwise traditional curriculum offered in schools.

In 2002, I returned to Fundación Paraguaya after a five-year stint as mayor of Asunción, at which point two interesting events occurred. First, we decided not to accept the offer of our friends at Accion International to help us raise capital, become a regulated bank, and follow the path that most microfinance programs in Latin America were taking. Among other factors, Paraguay was in the middle of a huge banking crisis, and Fundación Paraguaya's board members were not sure that the time was right to become a bank. Instead, we decided to concentrate on "ruralizing" our microfinance loan and youth entrepreneurship programs in order to reach the poorest segment of the Paraguayan population. Second, Fundación Paraguaya was approached by a group of La Salle Christian brothers, who suggested that we take over their bankrupt, 60-hectare agricultural high school for poor rural youth. They had run out of the cash and people needed to run the school properly, and the government subsidies that paid teachers' salaries were arriving with frustrating irregularity and delays. The La Salle brothers saw Fundación Paraguaya as an organization that could provide the ideal solution to the school's two main problems: its lack of capital for operations and its graduates' lack of employable skills.

Fundación Paraguaya took over the San Francisco Agricultural School in 2003, with the idea of combining the foundation's two skill sets (financial inclusion for the poor and entrepreneurship training) and applying them to a new field: education for rural adolescents. We knew that microfinance worked, not just because of its financial strategies and strengths but also because it tapped into poor clients' dignity, self-respect, and self-reliance. We used high-quality, personalized approaches geared to clients' needs; for example, by making $40 loans that were to be returned in weekly installments. We thought that, if a financial development program to assist the poor could, by virtue of having a sufficiently large loan portfolio, cover its own costs, why couldn't an agricultural school cover its own costs? Indeed, why couldn't education for the poor (which is the lowest priority for governments in developing countries and thus has insufficient and irregular government funding and a history of poor quality) pay for itself?

Armed with these questions, and with the support of foundations such as Avina, Schwab, and Skoll, we applied what we knew worked in microfinance to the field of high school education. In 2007, five years after Fundación Paraguaya took over the San Francisco Agricultural School, the school generated $300,000 in income and covered 100 percent of its costs. With a market-based curriculum and the eggs, cheese, vegetables, and other products and services offered by 15 school-based microenterprises run by teachers and students, the school proved that it could survive. The school also proved it could guarantee almost 100 percent employability for its graduates.

How did we accomplish this? First we had to put ourselves in the shoes of poor rural youth. We knew that most young people in Paraguay, if not all, were coming of age with little or no prospect of economic prosperity. Why? Because they had little or no access to a high-quality, relevant education that would provide them with bankable skills. Thus they faced lives of chronic unemployment, poverty, environmental degradation, and migration as they moved as unskilled workers to overcrowded urban slums. For girls the problem was worse. A huge percentage of the country's out-of-school high school-age youth were girls. We were convinced that, with entrepreneurial training in a high-quality school, young people could create their own employment and transform their communities.

We knew that, given Paraguay's small industrial base and therefore its few factory-related jobs, creating jobs required creating entrepreneurs. We also knew that educating entrepreneurs required a school that practiced what it preached—entrepreneurship. We were convinced that by incorporating small businesses into the educational program the school could teach students practical skills and entrepreneurship while generating income to cover operating costs. Students thus would obtain the skills and knowledge needed to find jobs, create their own jobs, or continue their education—and the self-confidence and motivation to do so.

The small businesses we established on campus were all related to market demand and to fulfilling the agricultural curriculum established by the ministries of agriculture and education, which provide accreditation to our school and permission to grant high school diplomas, respectively. We established an organic vegetable garden; grew field crops such as sugarcane, cassava, and beans; raised chickens, goats, milk cows, and pigs; and set up a small cheese and yogurt factory. We also set up a roadside grocery store and converted an old dormitory into a small rural hotel. Teachers and students developed business plans and, working together, took turns running these income-generating educational enterprises.

So, how does our school work? In the classroom, students learn the underlying concepts of business and organic agriculture alongside general education courses.

Then in field-based classes they learn how these concepts work in practice and how to use them effectively. Through learning by doing, selling, and earning, students gain the practical and technical skills needed to master each discipline. Students rotate through the school's 15 business units and then choose a specialization and take on greater responsibilities. They also learn to how to manage financial transactions, monitor profitability, market and sell their products, and provide good customer service.

In 2005, our experience led us to establish (together with Nik Kafka, a former volunteer at Fundación Paraguaya, and a few British fellow social entrepreneurs) a UK–based social enterprise called Teach a Man to Fish. Its mission is to disseminate the concept of financially self-sufficient schools for the poor worldwide, including the lessons learned from the Paraguayan experience, and to support self-sufficient startup schools and on-campus educational enterprises throughout Latin America, Africa, and Asia. Thanks to foundations such as MasterCard and Saville, there are now more than 27 schools in 10 countries in the process of implementing Fundación Paraguaya's financially self-sufficient school model. Thousands of other schools throughout the world are establishing school-based educational enterprises. In all, more than 4,000 member organizations from 200 countries are participating in Teach a Man to Fish activities, thus demonstrating the growing worldwide interest in creating effective educational programs for the poor.

What have we learned in the process? Among other things—amazingly—we have seen how our high school graduates in Paraguay move almost seamlessly from poverty into the Paraguayan middle class. We have seen many adolescent boys and girls from backgrounds of extreme poverty almost levitate materially and mentally into a nonpoor state. We saw dignity at work, fueling students' motivation to take on huge challenges and seize spectacular opportunities. Through learning not just how to grow tomatoes but also *how to make money* from growing tomatoes, our graduates acquired the motivation and skills needed to find decent jobs, go on to university, or return to their family farms to implement the income-generating practices they learned at the San Francisco School.

Since students graduate with business plans and small loans to finance their future business endeavors, parents usually welcome their trained daughters and sons with open arms back to the family farm. In one case, a young woman convinced her father to switch from planting cotton (a back-breaking job) on five hectares to growing a half-hectare of chili peppers for greater profit. In another case, a young man convinced his father to visit supermarkets in the capital city to see for himself how much middlemen were taking advantage of him by buying his products without any value added.

QUADRANTS, PERSPECTIVES, AND INFLUENCING CHANGE

Encouraged by these new insights and lessons learned, and with support from the Peery Foundation, we shifted our attention back to our microfinance program. Just as we had used our microfinance experience to help us change the way rural schools for poor farmers can be conceptualized and run, we were now in a position to enrich our original flagship program. We asked ourselves why more of our microfinance clients weren't lifting themselves out of poverty. Why were some clients stuck below the national poverty line despite years of financial inclusion and paying back their loans successfully? What was the intrinsic difference between our clients who overcame poverty and those who did not? How could we reconcile the differing theories and schools of thought related to poverty? Is poverty only about income or about other things as well? Where does the "culture of poverty" fit in? Are some poor people lazy, or are they "damaged merchandise," forever limited by the effects of malnutrition or a family mindset of resignation they learned in childhood? Or is poverty, in fact, a structural consequence of exploitation?

Around this time I met two great American thinkers who helped me organize my thoughts. The first was Ken Wilber, from Denver, Colorado, whom I first heard about through Jorge Talavera, one of our Fundación Paraguaya board members. Wilber wrote about integral theory in his book, *A Brief History of Everything*.[3] Wilber maintains that it is not only possible but advisable to simultaneously consider the multiple viewpoints and perspectives inherent in any debate. He maintains that systems theory is limited because it explains the "map" but fails to consider the perspective of the "mapmaker." Since "perspective is rationality," Wilber proposes that four quadrants can be drawn to help address the four major factors that affect any given issue.[4] He assigns the following names to these quadrants: behavior, system, culture, and intention. The first two quadrants represent views external to a person, and the latter two represent internal views. Wilber explains that behavior and intention are personal views, while the system and culture are collective views shared by a community. In this way, Skinner's behaviorism can be analyzed side by side with Freudian psychoanalysis, Marxism, and anthropology in trying to understand poverty. Wilbur advises that, to understand a problem from all standpoints, it is necessary to include the valid perspectives of everybody involved: the poor person, their family and community, the social activist, the nonprofit attempting to aid the poor, the microfinance institution, the social entrepreneur, the government agency, and the international donor. These "mapmakers" also shape the spectrum of possibilities and expectations about the "poverty map."

This easy and comprehensive analytical tool and conceptual framework allowed us to consider a much broader set of possible explanations for any question at hand. For example, in the case of a microcredit client who had no front teeth, we could formulate the four questions: Is it because she does not take care of her teeth and does not go to the dentist (i.e., a behavioral issue)? Is it because there is no dentist in her village (a systemic problem)? Is it because in her community a complete set of teeth for an older woman is not really valued (cultural)? Is she afraid of going to the dentist (intention)? We can understand why she is missing teeth and come up with an effective solution only if we can answer these four questions.

Of course, the same questions can be applied to a person's income or lack thereof, or to their access to drinking water, housing, vaccines, education, and other similar poverty indicators. Why is it that a woman earns only $2 per day, when earning $3.50 per day would bring her out of poverty? Is it because she does not produce enough tortillas to sell? Is it the lack of a market where she can sell the tortillas she produces? Is it that she believes no matter what she does she will always be poor, like her ancestors before her? Or does she not want to work more hours to earn extra money because she puts a higher value on staying at home and being with her grandchildren?

The other author who shaped my views and helped me grasp the complexity of poverty was Joseph Grenny, whom I met at Sundance Village, Utah, thanks to my friends Todd Manwaring and Dave Peery. Grenny is the coauthor of several books, including *Influencer: The Power to Change Anything.*[5] Grenny explained to me that research showed that, for people to change, they must answer yes to two questions: Is it worth it? Can I do it? These relate to motivation and skills, which apply at the individual level, the group level, and the structural level. Grenny says that six sources of influence must be addressed if personal change is going to be permanent.

What do these theories mean for the poor and for an organization such as ours? Well, combining the four quadrants of integral theory and Grenny's two key questions reveals six sources of "positive influence." These sources can make it much easier for an individual to overcome poverty or, as Grenny and his coauthor Kerry Patterson like to say, to change anything. At the individual level, motivation entails learning to do things one does not normally like to do, and skills require overcoming personal limitations in terms of know-how. At the group level, motivation involves harnessing group pressure to motivate the poor to persevere in the pursuit of their goals, and skills involve enlisting group support so that others (e.g., friends, family, and other members of the community) can help them achieve their goals. At the structural level, motivation entails using strategies such as incentives and rewards to motivate the poor (as well as our loan officers), while skills relate to changing things about the physical environment or the system that prevent the poor from acquiring the skills needed to achieve their goals.

Grenny encourages us to pay attention to the "positive deviants" in any given rural village or urban community.[6] These are the people who should be poor, given their background and the communities in which they live, but are not. He urges us in particular to observe, study, and understand their "vital behaviors," or the habits that allow some people to overcome poverty while their neighbors remain poor, and the "crucial moments" in which they perform these vital behaviors. Grenny helps to define specific, measurable, and time-bound results for helping our clients rise out of poverty permanently.

Income & Employment		
1. Income/earnings above the line of poverty	2. Stable employment (stable business activity)	3. Credit
4. Savings	5. More than one source of income	6. Personal Identification

Health & Environment		
7. Potable Water	8. Health care center close to home	9. Nutritious diet (No malnutrition/ obesity)
10. Personal Hygiene and Sexual Health	11. Ophthalmologist and Dentist	12. Vaccination
13. Garbage Disposal	14. Unpolluted Environment (no deforestation/	15. Insurance (health and burial)

Housing & Infrastructure		
16. Housing with secure roofs, doors, and windows	17. Sanitary latrines and sewers	18. Electricity
19. Refrigerator and home appliances	20. Separate bedrooms	21. Elevated stove and ventilated kitchen
22. Tables, Chairs, Cutlery, and basic comfort	23. Access to roads in all weather conditions	24. Regular means of transportation
25. Police station and physical security	26. Telephone or cell phone	27. Sufficient and adequate clothing

Education & Culture		
28. Spanish literacy	29. Children educated through 9th grade	30. Knowledge and skills to generate Income
31. Ability to plan and budget	32. Communication & social capital	33. School supplies & Books
34. Access to information (radio & TV)	35. Entertainment & Liesure	36. Values cultural traditions and heritage
37. Respects other cultures	38. Human rights awareness	

Organization & Participation		
39. Forms part of a self-help group or other organization	40. Ability to influence the public sector	41. Ability to solve problems and conflicts
42. Registered to vote and votes in elections		

Self-awareness & motivation		
43. Self-awareness & self-esteem	44. Awareness of needs: personal goals	45. Moral consciousness & important values
46. Awareness of the emotional- affective spectrum	47. Aesthetic self-expression, art, and beauty	48. Psychosexual awareness
49. Entrepreneurial spirit	50. Autonomy & ability to make decisions	

Table 1. Six dimensions of poverty and 50 poverty indicators

Table 1 shows the 50 indicators Fundación Paraguaya uses to assess poverty levels. (See also appendix.) These are grouped under 6 dimensions: Income & Employment, Health & Environment, Housing & Infrastructure, Education & Culture, Organization & Participation, and Self-awareness & Evaluation. The original version of this table uses the colors of red, yellow and green to categorize these dimensions into either extreme poverty (red), poverty (yellow), or non-poverty (green). In this version of the table, the darker grey represents the color red, grey represents the color yellow, and white represents the color green. This table is an example of what a "Poverty Stoplight" survey would look like for one typical family with different poverties.

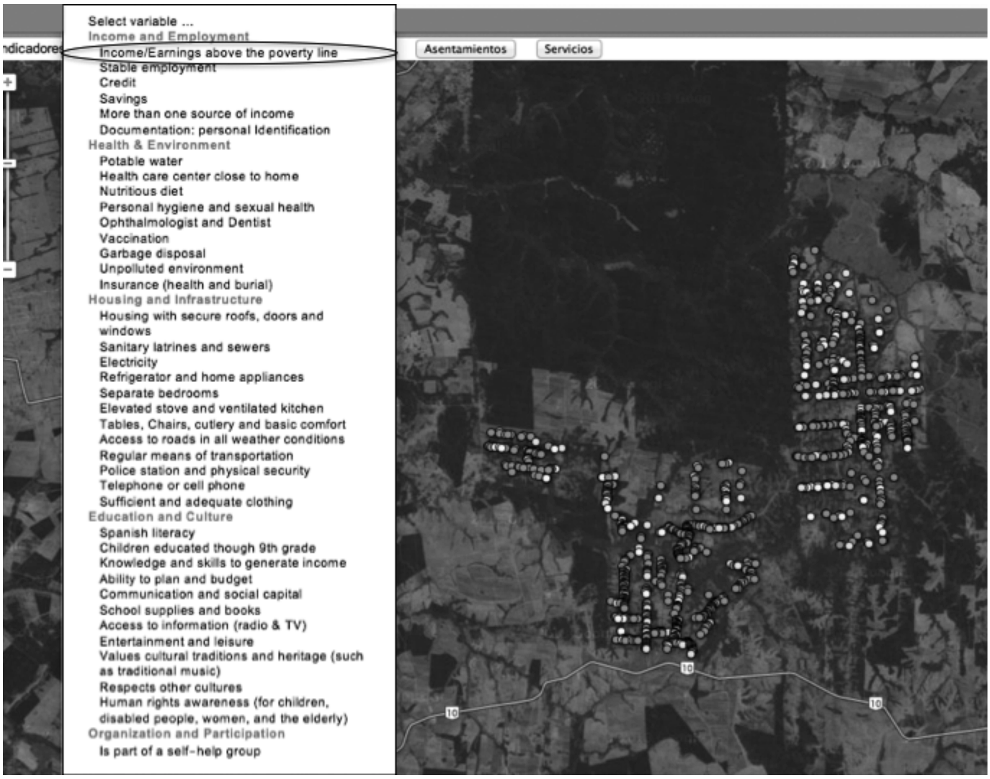

Figure 1. Poverty Map

Figure 1 is an example of the mapping software the government of Paraguay uses to geo reference families and their levels of poverty. Each point on the map represents a family home that has been surveyed with the "Poverty Stoplight" methodology. The drop down tab allows the user to select any of the 50 poverty indicators. After the selection, the map will change colors accordingly, representing the level of poverty for each family in that specific indicator. The original version of this figure uses the colors red, yellow and green to categorize these dimensions into either extreme poverty (red), poverty (yellow), or non-poverty (green). In this version of the table, the darker grey represents the color red, grey represents the color yellow, and white represents the color green. For example, in the indicator of "Income/Earnings above the Poverty Line" one can see that in this village there are families that are extremely poor, poor, and non-poor living next door to each other.

THE POVERTY STOPLIGHT APPROACH FOR POVERTY ELIMINATION

Armed with the integral theory and positive influence approaches, and thus not needing to simplify or find proxies for our work, we set out to identify various dimensions in which we could group different types of poverty indicators. We reviewed the development literature and opted for six poverty dimensions, believing that for practical purposes they could be sufficiently comprehensive yet manageable: (1) income and employment, (2) health and environment, (3) housing and infrastructure, (4) education and culture, (5) organization and participation, and (6) interiority and motivation.

Once we were comfortable addressing the multidimensionality of poverty, we compiled a list of 50 indicators that operationalized the six dimensions (see table 1 and appendix). We also identified three conditions for each poverty indicator (nonpoor, poor, and extreme poor), attaching the corresponding colors of green, yellow, and red to each. Knowing that our students' families and our microclients were mostly functional illiterates, we decided to include a photograph representing each of these conditions in the Paraguayan context. For example, to represent the three conditions in Paraguay for access to drinking water, a poor person taking our baseline survey can look at a photograph of a woman carrying a bucket of water on her head (extreme poor), a woman drawing water from a well outside her house (poor), and a woman turning on a faucet at home (nonpoor) and quickly indicate which photograph best represents her family's situation in terms of access to potable water. This is how the Poverty Stoplight was born.

In 2010, thanks to my friends Mirjam Schoening and Abigail Noble from the Schwab Foundation for Social Entrepreneurship, I met two people at the World Economic Forum in Davos, Switzerland, who would provide invaluable technological advances for the Poverty Stoplight approach. One of these persons them was Paul Ellingstad of Hewlett Packard's Sustainability and Social Innovation Team, who offered to help us develop an application that would serve as a platform for our baseline visual surveys to establish the level of poverty of each family across 50 indicators. We wanted our clients, as well as our loan officers, to be able to collect, "geo-reference," and transmit data from the field easily, using either cell phones or tablets.

The other person I met was Juliana Rotich, the founder of the nonprofit software company Ushahidi, Inc. In the aftermath of the 2007 political and humanitarian crisis in Kenya, Rotich and her team had developed a crowdsourcing methodology to collect information via text messages to locate and visualize data on political violence on a Google map. Juliana and I immediately saw the potential of using and applying her "activist mapping" (using geospatial information together with citizen journalism and social activism) for an equally grave and intractable problem in the world today: extreme poverty. If victims or witnesses of political violence could use their cell phones to transmit the location and seriousness of an event, why couldn't poor people use the same technology to transmit information about their own conditions? Figure 1 (previous page) is a screenshot of a rural settlement in Paraguay that shows homes in different colors, according to income.

Starting in 2011, Fundación Paraguaya staff members began surveying the level of poverty of our microfinance clients across 50 poverty indicators in the six poverty dimensions. The results were so powerful that we were forced to reexamine our mission and strategy. We realized that we, like most governments and nonprofits around the world, had been caught up in a false dilemma when it came to poverty issues. Until then, our antipoverty initiative had been limited to helping reduce or alleviate poverty by increasing family incomes. But if being "not poor" was never defined, how would we ever know if we had been successful? In contrast, with the Poverty Stoplight approach we could develop a results-oriented strategy and monitoring and evaluation systems for permanently eliminating poverty across six dimensions.

As such, the Poverty Stoplight approach is based on the following propositions. First, poverty has many more dimensions than simple insufficient income. A family may have per-capita income above the national poverty line yet still be poor due to a lack of decent housing, clean water, access to education and quality health care, or other requirements for a decent life. Second, poverty does not affect families uniformly. Each poor family is poor in its own way and therefore has a different set of poverty-related problems to resolve in order to overcome poverty. Third, the main protagonists in eliminating poverty must be the poor themselves. Institutions, however far-sighted or well funded, do not have sufficient insight into the poverty-related problems of individual families or sufficient resources to permanently eliminate poverty on their behalf. Moreover, an individual must adopt certain behaviors and attitudes in order to overcome poverty in all its dimensions and to maintain a standard of living that is not poor. Finally, a poverty-elimination strategy must be scalable, which implies that it must cost very little to implement and, ultimately, must be financially self-sustaining.

Fundación Paraguaya's Poverty Stoplight approach incorporates these four propositions into its strategy to eliminate poverty. The centerpiece of this approach is the self-evaluation visual survey tool, which allows each low-income person (typically a member of a women's microcredit village bank) to measure, take stock of, and plan how to resolve the poverty-related problems that affect her family. The tool is unique in that it enables the poor themselves to become aware of and measure their poverty in all its dimensions; it provides feedback in a form that low-income village bank members can readily understand; and it therefore empowers microfinance clients to become both the chief architects and protagonists of their own poverty-elimination strategy. At the same time, at very low cost, the stoplight tool can provide practitioners and change agents with detailed, family-by-family information on clients' poverty-related problems. With this information, we can provide products and services that serve individual clients' need most effectively; we also can identify client needs that go beyond the scope of our own activities but could be served through alliances with other organizations.

After forming a microfinance village bank, the bank advisor administers the Poverty Stoplight survey to each member. The survey consists of 50 questions in the form of sets of photographs. Each survey question has three possible answers, represented by three pictures: one shows the situation of a typical family living in extreme poverty; one a family living below the national poverty line; and one a family that is not poor in this particular respect (see figure 2, next page).

To complete the 20-minute survey, the poor person identifies the picture that best represents her family's situation for each of the 50 indicators. The village bank advisor enters this information into an electronic notebook, using software developed pro bono by Hewlett-Packard, and later downloads the data into Fundación Paraguaya's Stoplight database. The data from this initial survey provide the baseline against which to measure each client's progress in overcoming poverty. The

Indicator 7: Access to Potable Water	**Dimension: Health and the Environment**	
Definition: Water that can be consumed by people and animals without risk of contracting illnesses because it has been treated for human consumption according to quality regulations. It can also be water that is drinkable without previous treatment that doesn't contain substances that are dangerous to health. It should not have any odor, color, or flavor.		
LEVEL 3: The home has constant access to water during most of the day within the house. The source is reliable. The house has a faucet.	LEVEL 2: The home has access to water, but (1) does not have access all day long, or (b) has no faucet, or (c) water is located outside the home's property but within 100 meters of the house.	LEVEL 1: The water the family drinks is not potable, or it is located more than 100 meters away from home.

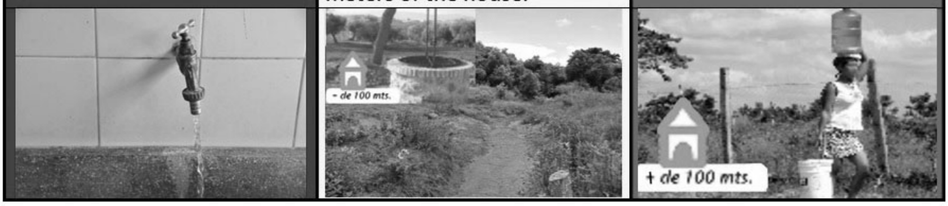

Figure 2. An example from the Poverty Stoplight survey

Figure 2 is an example of one question, out of 50, on the "Poverty Stoplight" survey. Each head of household that is surveyed completes the survey themselves, with the help of a loan officer or social worker, and uses the touch screen technology to complete the visual survey in an estimated 20 minutes. The person surveyed simply selects which of the three situations is most similar to their day-to-day life. In this example, the person surveyed selects their level of poverty in the area of "Access to Potable Water" by simply selecting whether they 1) have at least one faucet in their home-green-, 2) retrieve water from a well within 100 meters of their home -yellow-, or 3) retrieve water from a well that is more than 100 meters from their home -red-. By understanding what is to be poor (or not poor) in the indicator of "Access to Potable Water", each of our survey participants can evaluate their level of poverty in each indicator in a few seconds.

data also is geo-referenced in a Google map using the Ushahidi crowdsourcing platform.

After completing the survey, the poor person receives a one-page report showing in a heat map format the ways her family is extremely poor (red), poor (yellow), or not poor (green). Thus, she can see at a glance which of her family's poverty-related problems are most severe; those less severe, which she can work to overcome; and in which respects her family is not poor.

A general stoplight is also produced for the village bank as a whole (typically a group of 20 microfinance clients), which enables the group to see which members already have overcome certain problems and can provide role models for other village bank members, and which problems the group has in common. We have found that in Paraguay, where village banking clients are almost always neighbors and already know the financial situation of each member of the village banking group, privacy about each family's red, yellow, or green poverty indicators is not an issue. On the contrary, except for issues like domestic violence, everybody is well aware of their neighbors' situations.

Meanwhile, Fundación Paraguaya's village bank advisors and agricultural high school teachers learn how to use the integral approach to analyze the underlying causes of clients' and students' poverty-related problems, and how to motivate clients and students and lead them to adopt behaviors conducive to overcoming poverty.

Fundación Paraguaya's interventions are designed to empower its microfinance clients and students to overcome poverty in all its dimensions, as it affects them personally. As a first step, Fundación Paraguaya provides all its village bank clients with a standard package of services that offers solutions to several poverty-related problems. These include access to credit, required savings, membership in a solidarity group, and the various benefits of belonging to Fundación Paraguaya's Client Club. Club benefits include group health and burial insurance, store discounts, and recreational opportunities.

The village bank advisor also works with each client to develop a specialized package of services to address her family's particular poverty-related problems. Typically, the first task is to help the client develop a business plan to raise per-capita family income above the national poverty line. Thus, the package of personalized services might include a microloan to another adult member of the household; microloans to expand business premises or to finance the process of legalizing a business or establishing titles for land and other assets; and the opportunity to become a microfranchise by selling reading glasses, over-the-counter pharmaceutical products, basic foodstuffs, or other products that Fundación Paraguaya is working to turn into client microfranchise opportunities.

Fundación Paraguaya also empowers village banks and their communities to develop their own solutions to the poverty-related problems that members have in common. For example, Fundación Paraguaya provides microloans to nonprofit rural community water boards. It also connects client producers, such as low-income women producing agricultural goods, with client buyers, such as small grocery stores. It helps village bank clients organize themselves to take advantage of economies of scale by buying inputs, producing goods, and marketing their products as a group. It also encourages the most successful village bank members to share their business and personal skills with other members; for example, the literate members of one village bank are teaching other members of the group to read and write.

Fundación Paraguaya also seeks alliances with other institutions that can help its low-income clients address poverty-related problems that are beyond the scope of its own activities and expertise. To date these include Vittana (microcredit for education), Aflatoun (youth savings groups), Vision Spring (microfranchising of reading glasses), and Fundación Visión (trains Fundación Paraguaya's village bank advisors to screen for vision problems and refer clients to the appropriate eye-care institutions, including those that provide affordable cataract surgery).

Last but not least, Fundación Paraguaya encourages its clients to use their village banking structure to strengthen their organizational and participatory skills and to lobby municipal governments to provide needed services. This is a key factor, as it not only allows the poor to fight for their rights, it also helps government to better understand and quantify demand for specific goods and services. Usually, road and bridge construction, schools, post offices, police stations, and health posts or clinics are things that neither businesses nor nonprofits can provide. Given the scarcity of resources, the poor have to understand that the squeaky wheel gets the grease!

In 2011, Fundación Paraguaya's Poverty Stoplight program enabled 6,400 families (an estimated 32,000 people) to bring their family income above the national poverty line. A second intervention using the Poverty Stoplight in 2012 brought an additional 6,000 families above the national poverty line by year's end while enabling 600 of the previous year's 6,400 families to transform *all* the indicators in their family stoplights from red or yellow to green, indicating that they had overcome poverty in all its dimensions. In 2013, Fundación Paraguaya is helping another group of 6,000 families to rise above the national poverty line while working to ensure that previous "poverty graduates" remain above the poverty line. If an estimated 92,000 people have been lifted out of poverty by their own efforts, how much more can be accomplished if society as a whole makes a concerted effort?

Meanwhile, our staff has developed a curriculum and lesson plans so that teachers and students at our self-sufficient agricultural school can understand and address the 50 poverty indicators at each student's home. Needless to say, this has given our school a whole new role. It not only trains students to obtain employment (or self-employment) after graduation, it also trains them to understand the multidimensionality of the poverty affecting their families and to develop, together with their parents and siblings, strategies to generate income to put them above the poverty line and to close other gaps in their housing, health, and infrastructure conditions.

PUBLIC-PRIVATE ACTION PLAN TO ELIMINATE EXTREME POVERTY IN PARAGUAY

In June 2012, the Paraguayan congress impeached President Fernando Lugo after a peasant-led land invasion left 16 farmers and policemen dead. Social unrest had once again knocked on Paraguay's door, thereby signaling the existence of serious social problems.

Federico Franco, the new president of Paraguay, asked me to join his new cabinet as chief of staff. Among my responsibilities were the coordination of the "social cabinet" and the supervision of social spending in key welfare programs. The new president and I quickly became aware that, rhetoric aside, ending extreme poverty was not part of the budgeted government agenda. Social programs were designed to make a dent in the problem, and most (if not all) programs were old-fashioned in their approach, simply throwing money at the problems and later quatifying number of personnel, resources, technical assistance, training programs, and activities in each program, and altogether disregarding results. Impact evaluation was almost nonexistent.

In December 2012, after a few months of taking stock, the Paraguayan government, frustrated by the apparent inelasticity of poverty with respect to economic growth and to its increasing portfolio of welfare programs, decided to zero in on extreme poverty. It assembled 30 government agencies that could play a role in addressing the problem and called on the business community, universities, nonprofits, and social activist organizations to form a public-private partnership to address this intractable problem.

A month earlier, in order to curb the misuse of ever-increasing public funds allocated for social welfare programs, the new government had established the National Anti-Corruption Agency, the Executive Branch Code of Ethics, and the Unified Registry of Welfare Recipients. Aware of the limitations of the traditional governmental approach, we posed new questions: Who are the extreme poor? Where do they live? How poor are they and in what "dimensions" of poverty are they poor? How do we establish a baseline and how do we get the poor themselves involved in solving their problems? What types of poverty need to be dealt with? Does addressing insufficient income solve other problems affecting poor families? Do "trickle-down" economics apply to the poor in Paraguay? Once they have enough income, will they access health, education, water, and housing on their own initiative?

The Paraguayan National Census did not answer these questions, and the government had never before posed the questions. "What do you mean you want the names and addresses of people living in extreme poverty?" conservative bureaucrats would say. "That's preposterous!"

That December, the government officially launched its Public-Private Partnership Action Plan to Eliminate Extreme Poverty by 2018. It incorporated the Poverty Stoplight methodology as government policy, and used the poverty-mapping tool to identify the 400 rural villages, 1,000 urban slums, and 116 indigenous villages where it thought the country's 1.2 million extreme poor were living. The Paraguayan government also determined that it had to officially earmark $2.4 billion in the budget over five years to ensure that 30 different agencies could deliver goods and services to more than 200,000 extremely poor families. Finally, the Poverty Stoplight provided a methodology that enabled 1,516 businesses to sponsor one extremely poor village or settlement in their communities, and thereby become the designated social activist interacting with the government on behalf of its adopted community, using the Poverty Stoplight methodology.

The Public-Private Partnership Action Plan is innovative in that it is concrete, stating who, what, when, where, why, and how the elimination of extreme poverty will take place. It is not a government plan per se but a joint public-private effort that incorporates businesses, universities, and civil society, in addition to the government and the poor families themselves. It is a plan to permanently *eliminate* poverty—not reduce it, have a war on it, or fight it. It focuses on extreme poverty, a specific subset of poverty.

"ALL HAPPY FAMILIES ARE ALIKE": LESSONS LEARNED AND POLICY IMPLICATIONS

Russian writer Leo Tolstoy began *Anna Karenina* with the following sentence: "All happy families are alike; every unhappy family is unhappy in its own way." By seeing the results of our Poverty Stoplight, we have come to understand that every poor family is poor in its own way and therefore needs an individualized strategy to eliminate its poverty.

We also have learned that social entrepreneurial organizations like Fundación Paraguaya can be more efficient and effective than governments in developing social innovations. It's not that public-sector innovation is not possible, but experimentation is easier in the private sector, budgets are more flexible, perspectives are more open, and time constraints are different. In government, one is allowed to do only what the law permits, while in the private sector one is free to do anything that the law does not forbid.

Fundación Paraguaya was not only able to see problems as opportunities, we also saw what no one else was seeing at the time: how to apply what worked in microfinance to education, and then to apply lessons learned in our self-sufficient schools for the poor in our village banks. Of course, we were never working alone. We always were accompanied by others both inside and outside the field of development and many people helped us reach our goals. We will need many such partners around the world in order to take our solutions to scale and reach the millions of people who really need new tools to permanently overcome poverty.

With the Poverty Stoplight, Fundación Paraguaya was able to test new hypotheses, take stock of lessons learned, and propose a new way of looking at poverty that combines various traditional approaches in an innovative way, including (1) the multidimensionality of poverty, (2) a human rights approach, (3) an integral and holistic focus, (4) a focus on the poor person's family, (5) emphasis on the wealth and potential inherent in human beings, (6) shared responsibility and self-reliance, (7) public-private partnerships, (8) education and training for social and economic inclusion, (9) a territorial focus and geo-referencing, (10) baseline data, (11) results and impact evaluation, and (12) transparency and rationality.

By focusing on a locally validated concept of what it is to be "not poor" across 50 indicators and defining, consequently, what it means to be poor and extremely poor, the Poverty Stoplight "granulates" a complex system such as poverty, making it possible for the social worker or the microfinance loan officer to understand the nature and seriousness of the different ways poverty affects poor families. It is now possible for every poor family to have an individually tailored plan to help them "graduate" out of poverty . Furthermore, since most poor families are not poor in all respects, it is possible to leverage the areas where the poor are successful to promote change in weak areas. Thus, the Poverty Stoplight provides hope by allowing the poor person to visualize her future flush toilet when she assesses her pit latrine.

The Poverty Stoplight approach also reduces the concept of poverty to an income gap relative to the indicator for the poverty line. If a family of four in a slum of Asunción must earn $420 per month in order not to be poor ($3.50 per person per day, or $14 a day for the whole family) and the family only earns $300 a month, their poverty is thus an income gap of only $120 per month. "Positive deviants" living in the slums are proof that a family can be motivated and trained in just a few months to earn an additional $120 a month. And because our experience has shown that there is a lot of "low-hanging fruit"—that is, many families in Paraguay are almost "not poor" in many indicators—we have realized that a poor family can quickly get on a path out of poverty.

Finally, the Poverty Stoplight strategy is scalable and replicable because it costs little to implement and can be adapted to any country. Nigerians, Brazilians, Palestinians, and Indians have their own definition of what it is to be not poor across different poverty dimensions and indicators. If in Paraguay having at least one water faucet in the house amounts to being not poor with respect to water, in Nigeria there must be an equivalent. Why? Because people in every country know perfectly well what it means to be not poor, to be poor, and to be really poor in every aspect of life because they see all these conditions in their own communities.

In conclusion, for poor families themselves, for social workers or microfinance loan officers, for social entrepreneurial organizations, for businesses, and for governments at all levels, the Poverty Stoplight can be a powerful tool for eliminating poverty because it simplifies, disaggregates, helps visualize, and proposes a way out of poverty. Unlike other tools and methodologies that search for proxies to promote change, the Poverty Stoplight embraces the extreme diversity and singularity of poor families. It enables change agents to visualize the opportunities by looking at red, yellow, or green dots on a Google map; technology and software producers to see how they can adapt what works in some industries to serve the millions struggling to overcome poverty; governments and businesses to use the Poverty Stoplight to understand how to eliminate poverty in their communities; and, finally, it enables poor families to raise their consciousness by seeing where they are starting from and the territory they must cross to arrive at a better reality.

Acknowledgement

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APPENDIX: THE FIFTY INDICATORS

Income and Employment
Income/earnings above the poverty line
Stable employment or business activity
Credit
Savings
More than one source of income
Documentation: personal Identification

Health and Environment
Potable water
Health care center close to home
Nutritious diet (no malnutrition or obesity)
Personal hygiene and sexual health
Ophthalmologist and dentist access
Vaccination
Garbage disposal
Unpolluted environment (no deforestation or degraded soil)
Insurance (health and burial)

Housing and Infrastructure
Housing with secure roofs, doors, and windows
Sanitary latrines and sewers
Electricity
Refrigerator and home appliances
Separate bedrooms
Elevated stove and ventilated kitchen
Tables, chairs, cutlery, and basic comforts
Access to roads in all weather conditions
Regular means of transportation
Police station and physical security
Telephone or cell phone
Sufficient and appropriate clothing

Education and Culture
Spanish literacy
Children educated though ninth grade
Knowledge and skills to generate income
Ability to plan and budget
Communication and social capital
School supplies and books
Access to information (radio or TV)
Entertainment and leisure

Values cultural traditions and heritage (such as traditional music)
Respects other cultures
Human rights awareness (for children, disabled people, women, and the elderly)

Organization and Participation

Is part of a self-help group or another group/organization that helps her become a more self-actualized person
Has policy advocacy capabilities and can influence the public sector
Has ability to solve problems and conflicts
Is registered to vote and votes in elections

Interiority and Motivation

Self-awareness and self-esteem
Awareness of needs (personal goals)
Moral values and consciousness and
Awareness of the emotional-affective spectrum
Aesthetic self-expression; appreciation of art and beauty
Psychosexual awareness
Entrepreneurial spirit
Autonomy and ability to make decisions

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1. Salomón, J. (2013, August 25). *Exportaciones de Paraguay expresadas en raciones de alimentación para consumo humano*. Ministerio de Industria y Comercio.
2. For more than two decades, Paraguayan business and social leaders Guillermo Peroni, Esteban Burt, Antonio Espinoza, Daniel Elicetche, Alvaro Caballero, Raul Gauto, Pascual Rubiani, Yan Speranza, Amado Adorno, Margarita Kelly, Fernando Peroni, Marta Lane, Roberto Urbieta, Enrique Lando, Jose Antonio Bergues, Ruben Fadlala, Marcos Goldemberg, Astrid Gustafson, and Guido Britez have been our most active directors and members.
3. Boston: Shambhala Publications, 1996
4. Wilber, p. 104
5. New York: McGraw Hill, 2008.
6. Positive deviance is defined as "intentional behaviors that depart from the norms of a referent group in honorable ways.", as defined by G. Spreitzer and S. Sonenshein from the University of Michigan Business School (*American Behavioral Scientist*, Vol. 47 No. 6, February 2004 828-847), p. 828, retreived from http://webuser.bus.umich.edu/spreitze/ABS_SpreitzerSonenshein.pdf on 10 july, 2013.

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Reducing Poverty by Employing Young Women
Hathay Bunano's Scalable Model for Rural Production in Bangladesh

Innovations Case Narrative:
Hathay Bunano

Hathay Bunano ("hand-made" in Bangla), founded in 2004, produces hand-knitted children's toys, both under our own brand, Pebble (www.pebblechild.com) and for international private-label clients around the world.

Using an innovative and much-needed model of rural production, we have taken the less skilled and time-consuming production tasks to the villages, creating jobs for thousands of young women whose economic opportunities are quite limited. For these young women, Hathay Bunano offers an alternative to moving to the city to work long hours in unsafe garment factories and spending most of their income on rent and food in unsanitary slums. Instead, given our 64 low-overhead rural production centers, these women can work within walking distance of their homes with highly flexible working hours that accommodate the cycles of the agricultural seasons and other family responsibilities. Our distributed production model has addressed many of the health and safety concerns that come with large

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Although all three authors contributed to the development of this article and it uses the first person voice of Samantha Morshed, Hathay Bunano's founder, it was written primarily by Kevin McKague.

factory production, such as the building collapse in April 2013 in Savar, a Dhaka suburb. In the largest industrial accident since the 1984 Union Carbide gas release in Bhopal, India, it claimed the lives of 1,127 people—most of them young women.

Hathay Bunano employs over 6,500 women aged 18 to 30 in flexible, well-paid, and relatively high-quality jobs in rural areas, helping reduce poverty in a country where 40 percent of our 160 million people live on less than $1 a day.[1]

Hathay Bunano is innovative in two ways. First, it has scaled up a distributed rural artisanal production model that takes jobs to rural areas and to poor and disabled young workers in a way that is commercially competitive in the global marketplace. Second, it generates decent flexible jobs that create many spin-off benefits for individuals, families, and communities. We believe the Hathay Bunano model is important because it has the potential to improve both handicraft business models and production practices in the ready-made garment industry.

BARRIERS TO OPPORTUNITY FOR YOUNG WOMEN

In a poor country with few good job opportunities, Bangladeshi women in their late teens and early twenties are often seen as financial burdens to their families.

Families respond by arranging for them to marry when quite young, or sending them to cities to work in garment factories. Although the ready-made garment industry in Bangladesh has generated a tremendous number of jobs, these jobs require working long hours at minimum wage in less than ideal conditions. In addition to the tragic loss of lives in Savar, over 600 Bangladeshi garment workers have died in preventable factory fires over the last five years. Moreover, young

Taslima's Story

When Taslima first joined Hathay Bunano she was living in a room eight feet square with her husband and their baby Habiba, along with her parents-in-law and younger sister.

The room had no facilities and they shared one toilet, four gas burners, and an intermittently operating water pipe with 80 other people. Her husband made less than $1 a day when he could find work pulling a rickshaw, and the family was living a precarious life in poverty. Taslima had worked in one of Dhaka's many garment factories but was forced to leave when Habiba was born. While garment factories are required by law to provide day-care facilities and maternity leave, the law is not enforced and day-care rooms at factories sit empty. Young women who become pregnant are let go, with some other reason given for their dismissal. Now that she works for Hathay Bunano and has a second child, Taslima takes them both to work with her, the baby to the crèche, which is clean and bright with lots of toys, and Habiba to the preschool. Employees' babies come to the crèche until they are three; their mothers are available for them at any time and can breast feed as necessary. They then attend preschool until age six, with a trained teacher. In Bangladesh, children begin attending school at age six; by offering preschool we can give the children a head start and a much better chance of getting into the better local free schools.

women living in the cities are often sexually harassed or pursued by boys and men. Turning down a man's advances can lead to an acid attack: an average of 200 occur every year.[2] Even when a girl finds a boyfriend herself, doing so can create difficulties for both her family and the young man's.

These are the same reasons why it is vital to create rural employment opportunities for young women. They can take on entry-level hand-knitting jobs with us and work their way up to becoming a trainer or manufacturing center manager;

they can also request our assistance in setting up centers of their own. We have seen many women delaying marriage because they are financially self-sufficient and are contributing economically to their families (see box, Taslima's story). The flexible working hours also mean that they can work with us while attending school (see box, Rozina's story). Also, the very nature of garment and textile work makes it possible to create employment for young women with disabilities, who face a dishearteningly high level of social stigma (see box, Yeasmin's story).

THE IMPORTANCE OF QUALITY EMPLOYMENT

Almost all of Bangladesh's 5,000 garment factories are located in Dhaka and Chittagong, the country's two largest cities. The young women who migrate from rural villages to work at these factories often live in appalling conditions, paying high rents to landlords who take advantage of the situation. The country's minimum wage has increased twice since 2000; with each increase, rents rise proportionately, leaving economic migrants no better off. Therefore, focusing only on wages will not automatically improve the living conditions of these workers. If the garment industry could relocate some of its production to rural areas following Hathay Bunano's model, it could offer much better employment conditions, keep families intact, and allow incomes to be spent in local communities. Employers would likely see greater productivity, reduced turnover, and greater loyalty from their employees.

In contrast to the urban factories, we offer several advantages to young women. First, our employees can work flexible hours in their home villages, so they need not disrupt either the rhythms of the day and season or their family and community bonds. Second, our workers are safe. It is estimated that 20 percent of Bangladeshi garment factories present high or imminent risks to their workers because they do not meet fire, safety, and health standards; under 2 percent meet very high safety standards. Instead of crowded, individual, indoor work and potentially unsafe working and living conditions, our small, safe rural centers are integrated into local communities. Third, mothers can keep working, instead of having to leave their factory jobs when they start a family. We include child care and early childhood education in our rural production centers. We also offer young women opportunities to develop their knowledge and skills and to work their way up through the organization into training and management positions. Thus, we aim to reduce poverty through employment by enhancing, rather than disrupting, the social and economic fabric of communities. At the same time, we are competing in the international marketplace very successfully, and offering a scalable model for rural production replicable in other least developed countries.

Women who make knitted items for Hathay Bunano are paid on a piece-rate basis that aims to compensate them at a rate 25 percent higher than Bangladesh's official minimum wage and 150 percent higher than the typical rates for similar rural-based work. We are currently in the process of reviewing fair living wages with Ecota Fair Trade Forum, the forum for fair trade in Bangladesh. In the rural

	Individual Level	Collective Level
Economic Development	Poverty alleviation, income	Economic growth
Social Development	Empowerment and self-esteem	Social cohesion

Figure 1. How jobs contribute to socio-economic development

Source: Adapted from IFC, "IFC Jobs Study," Washington, DC: World Bank, 2013.

context it is important not to pay too much above community norms; doing so can lead to considerable family and cultural difficulties if, for example, a woman earns more than her husband. We calculate the time per piece generously so that women can put in extra effort and earn more income if they choose. They are free to work as much or as little as they want, based on their availability and need for income.

Because women are employed in their own communities, they also spend their earnings there, further benefiting the local economy.

Working together at rural production centers is also a safe and acceptable way for young women to socialize and build ties within their community. Although they may live fairly close to one another, many of our young employees do not initially know each other, so working together lets them develop a sense of community.

The employment we create shows that not all jobs are created equal in terms of their contribution to individual and community development. Although jobs are important for reducing poverty, some jobs contribute much more to overall socio-economic improvement than others. This point was emphasized by the recent IFC Jobs Study that identified four ways that employment contributes to development: it alleviates poverty, stimulates economic growth, and increases both personal empowerment and social cohesion (see Figure 1).[3]

Jobs help reduce poverty because they typically offer poor individuals higher and more stable incomes than day labor or necessity entrepreneurship. With more income, they have more opportunity to save, and to consume the goods and services—education, health-care, food, housing—that improve their options and standard of living. Jobs also help people develop individual skills and mental and physical abilities.

Second, jobs contribute to economic growth both in low-income communities and across regional and national economies more broadly. Whenever resources—human, natural, and financial—are allocated to more productive purposes, the entire society benefits through economic growth, as long as negative externalities,

like ecological damage, are avoided.[4] Preventing, or compensating for, the ecological externalities of economic growth is essential if the gains from growth are to benefit the poor, who rely disproportionately on natural resources for their livelihoods and are at greater risk of harm from ecological damage and climate change.[5] Jobs create greater positive spin-off benefits for the economy when they reduce gender gaps (like our work at Hathay Bunano) create public goods (like clean air and water), or help diffuse more sustainable and efficient practices throughout an economy, as we hope to do with the ready-made garment industry.[6]

Third, jobs contribute to individual empowerment and self-esteem. Beyond the positive economic effects of increased individual income and consumption, being employed has positive psychological effects, including an enhanced sense of identity, satisfaction, and self-worth.[7] This is especially true for individuals marginalized in the labor market, such as disabled young women.

Fourth, jobs contribute to social cohesion. Interacting with others at work is a key way people socialize; we see this daily in our rural production centers. Interrelating through productive work increases the sense of connectedness within communities and society.[8]

The 2x2 framework in Figure 1 suggests that all jobs do not have an equal impact on individual and community development. At Hathay Bunano we aim to produce high-quality products competitively in the global marketplace while also creating good jobs for poor rural women in their communities.

Yeasmin's Story

In Bangladesh, it is unheard of for a disabled woman to marry and have chidren.[9] The disabled are largely shunned by both their families and the community and face enormous discrimination. This makes Yeasmin's story a source of hope and inspiration.

Yeasmin is just over three feet tall, and thus considered disabled. She first came to Hathay Bunano at age 17. She had been living at the Center for the Rehabilitation of the Paralyzed, an inspirational NGO working with those who are both disabled and poor. When Yeasmin was 12, her father died and she was taken to live at the center, against her wishes. In 2006 she heard about Hathay Bunano and joined a training course in crochet.

Two other women, Jolly and Shima, both in wheelchairs, were doing crochet work at the center. We suggested a very bold step: to set up a residential room in the Hathay Bunano complex where all three could both live and work. While Yeasmin is short, she is capable of cooking and shopping and could look after the other two. So they moved in.

This worked well for a year or so until the landlord decided it was not good for his reputation to have disabled women living on his property. For a while, out of sheer stubbornness, we chose to stay in the building, but the landlord turned off the gas connection and deactivated the lift, making the building clearly unsafe for the women. We moved to a new building, but that landlord also objected to tenants with disabilities. We needed another solution.

My husband's family has a property in a village near Sonargoan, about an hour from Dhaka. The three women agreed to move there to live and work. They lived there very happily for three years, in fact so happily that Yeasmin met and married Hamid. He didn't see her disability. He saw only her lovely smile and sunny personality, and her strength and capability. She also had a secure and well-paid job.

Yeasmin and Hamid now have a beautiful baby boy and live in a house near the current Hathay Bunano head office. Yeasmin works there, leaving her baby in the crèche. Hamid found work in construction. They earn enough to care for their son and put away some savings. Yeasmin is already making plans for her baby's education and future. She has broken down cultural barriers and is a great role model to disabled women in developing countries around the world.

MAXIMIZING EMPLOYMENT FOR DISADVANTAGED WORKERS

Another important thrust of our work is to shift manufacturing tasks as far down the value chain as possible to maximize rural employment for young women. This usually entails locating the time-consuming, labor-intensive activities in the villages. Higher-skilled jobs, such as quality control, international customer relations, and new product design, are done in our head office in Dhaka. Other activities are handled most productively in the UK: graphic design and branding in North Wales, photography in Epsom, and public relations in London. This arrangement guarantees maximum efficiency, scale, and growth—and maximizes the amount of work the young women can do in the villages.

Moreover, given the nature of the work, we can employ women who are illiterate and/or disabled (see box, Yeasmin's story). The World Health Organization estimates that up to 10 percent of all Bangladeshis are disabled.[10] We work with other organizations to hire disabled workers and allocate some of the simplest designs to artisans with more limited skills and abilities. We believe that Hathay Bunano has done for the hand manufacturing sector what impact sourcing organizations like Samasource and Digital Divide Data are attempting to do in the sectors of business process outsourcing and computer data entry.[11] We outsource as much of the work as possible to maximize the employment opportunities for disadvantaged workers: people who are young, poor, disabled, and/or refugees. Our model shows it is possible to create economic opportunities at scale. We have almost doubled our number of employees every year since we began operations in 2004. As of June 2013, we are manufacturing 250 different items and shipping between 80,000 and 120,000 pieces per month, depending on the season.[12]

MY PERSONAL STORY

I was 24 when I first visited Bangladesh with my British-Bangladeshi husband, Golam Morshed. Having never been outside Europe, I was completely shocked. At the Dhaka airport, the heat, the humidity, the noise, and the chaos were overwhelming. I arrived in September 1994 during a huge flood. It was so hot and humid, I still remember, that it took me a few minutes to catch my breath. All the roads were flooded up to the top of the cars' tires.

As we had been raising money for an NGO in Bangladesh, we went to the villages to see some of the projects they had been running. I visited many where the women were making embroidered items. It was always the same: they would ask me if I liked the cushion cover or bedspread and of course I would say yes. But to me they were, and could only ever be, tourist items. They would sell locally because they let tourists take away a memory of the place, but with few tourists in Bangladesh this clearly wasn't a huge market. So, in my broken Bangla, I would try to explain to the women that it didn't matter if I liked the items or not. The question they had to ask themselves was, "Would it sell in a shop in Europe or North America?" For me this is still the single most important question when starting any

Rozina's Story

Rozina started to work with Hathay Bunano five years ago. She attended the first training course in Jessore, and we later hired her to supervise the Jessore rural production center. A hard and diligent worker, she has been putting herself through university with the money she earns from knitting. She is currently in the final year of her honors degree.

Rozina's mother and father, Alea and Sofiar, also knit for us. Rozina taught Alea to knit, and she soon began working at Hathay Bunano. Then Sofiar, a landless agricultural day laborer, saw Alea and Rozina enjoying their work and making a good income and decided he also wanted to learn to knit. Sofiar also was concerned that he would not always be able to do strenuous agricultural work and earn enough to put Rozina's two younger siblings through school. Rozina taught him to knit, and in 2012 he started to make the popular knitted snake rattles for us, and became Hathay Bunano's first male knitter. Their parents' income from Hathay Bunano is helping to educate Rozina and her siblings.

production or manufacturing business: Where do you intend to sell, and who is the intended customer?

During family visits over the course of many years, I had the opportunity to see many rural handicraft projects that sought to generate employment by leveraging the women's skills in making embroidery, textiles, and other artisanal products.

Although the women were talented and willing to work, the poverty was especially challenging in rural areas and among young women and female-headed households.[13] Although NGOs had been funding projects for decades, few were on a large scale or responded to the preferences of international customers. At the same time, I was aware that the huge ready-made garments industry in Bangladesh had grown tremendously over the past few decades and now employed 3.6 million people, primarily young women.[14] Job creation on this scale was once unimaginable. I believed that the handicraft sector could learn something significant about scale, consistency, quality, and attractive designs from the garment sector. I applied these principles to my emerging idea for rural hand-made manufacturing. Without knowing it, in those early days we were sowing the seeds for a new business model for both the handicraft sector and the garment industry.

Somewhere I heard the saying, "Once you have seen you can never un-see." I think of this when I remember my early visits to Bangladesh. Seeing tragedy and difficulty and poverty on television is very different from seeing it for real with all the smells and sounds and human connections. From my first visit, two questions lived with me every day: how to create economic growth in the rural areas of Bangladesh, and how to create opportunity for the rural poor.

Then, in 2000, I gave birth to my first son. Born four weeks early, he was very, very tiny and spent his first week in an incubator. Once he grew a little and came home, I was left with two distinct thoughts that have changed me permanently. First, if I had been a poor woman in rural Bangladesh, neither Zaki nor I would have survived. Second, how could a mother ever be separated from her child? It just seemed so wrong to me that women could be separated from their young children for long periods in order to get work and that families could survive only if the young women would migrate to urban factories. In 2004, when we arrived in Bangladesh as a family, I had had a decade to mull over what needed to be done and potential new ways to do it. So I set out to create a handicrafts project and fix all those things I had felt were wrong with existing projects.

PRODUCTION PROCESS

My husband, Morshed, and I established our first rural production center in the village of Shilmona in 2005. Today we can establish a center wherever a group of 100 women are interested in working and are willing to undertake six to eight weeks of training in knitting, crocheting, or embroidery. On average, our centers employ about 100 women, including two or three salaried local supervisors who began as employees themselves. We have found that clustering two or three production centers near each other creates a critical mass of loyal and skilled local talent which has several beneficial effects: it helps retain workers, raises productivity, and reduces the costs of training and transportation. We bring in supervisors and trainers from another production center to live in the village until the initial training is complete, production has begun, and local supervisors are selected and take over management of the center. Local supervisors are given responsibility for production, including quality control and paying workers each week.

Since we established our first center, we have developed a streamlined procedure for establishing additional centers, which currently number 64 (see Table 2). We generally go into a new location at the invitation of the community. We send in two trainers who live there and teach the local women to knit for several months. Hathay Bunano trainers are women who started their career with us as artisans; they come from villages just like those where they will teach, and their lives are very similar to those of the new trainees.

We entrust overall responsibility for the center to one of the best performing women, one who has a strong ability to pick up a new design and specifications for an item and an eye for quality, although she may not have the educational background to undertake administrative tasks and maintain accounts. If she lacks these

	2005	2006	2007	2008	2009	2010	2011	2012
Centers	4	9	15	24	34	45	54	64
Employees	300	625	1,200	2,000	3,500	4,300	5,600	6,500

Table 2. Hathay Bunano's growth

skills, we train her to develop them. Up to three supervisors, depending on the specialization of a center, one each for crochet, knitting, and embroidery, are selected from the trainees, based on their skill level, performance, and ability to disseminate the idea among the group members when an order with a new design comes to the center. Where the community requires child care or a teacher, two women are hired to provide it so that working women can always be close to their children.

From our head office in Dhaka, Hathay Bunano employs 108 staff to liaise with foreign buyers, supply production centers with the required raw materials, coordinate training, undertake the final stages of quality control and finishing (for example adding faces) and label, pack, and ship finished products (see Figure 1).

Designs for new products are brought to the rural production centers by master trainers who have moved up through the ranks and now work in the head office. The trainers and workers help to perfect the production process. Product quality is critical for our international clients and we emphasize it throughout the production process. Items shipped to our head office are checked for size, pattern, and color. When we find a production error, we send the item back to the respective worker to be fixed or reworked. The problem-free items, once washed and dried, are given a final check before being labeled, packaged, and shipped for export or to local shops.

SAFETY, ENVIRONMENTAL SUSTAINABILITY, AND TECHNOLOGY

All our toys conform to European safety standards and are "CE" marked for the European Community.[15] In addition, our wholesalers around the world undertake any testing that is necessary for their territories. All our yarns are certified by Oeko-Tex, an international testing and certification system for textiles.[16] We also offer a wide range of toys made from organic cotton. In addition, we have a large flat-bed metal detector in our finishing center; all products pass through it before being boxed for dispatch. Although our workers largely use crochet hooks and knitting needles and our products would rarely include a broken stitching needle, we err on the side of caution. In another effort to provide safety, our rural centers are all small single-story buildings with two exits.

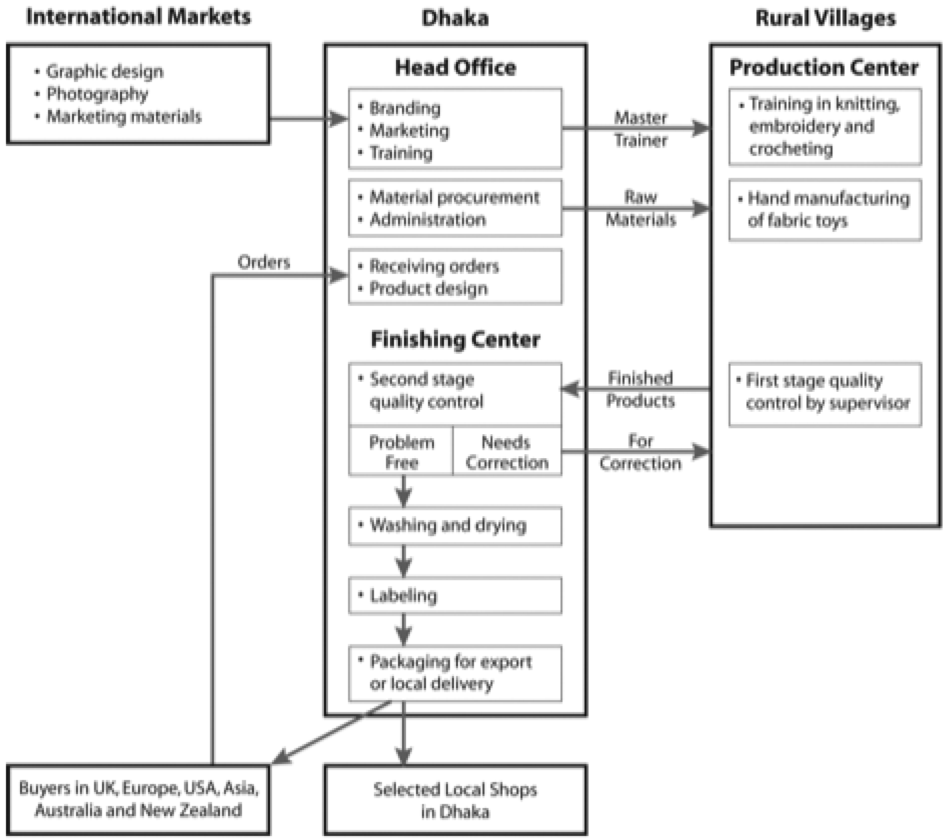

Figure 1. Hathay Bunano's production process

Technology has been key to our growth. Much as our global value chain maximizes rural employment, we use technology to good advantage. On the low-tech side, production equipment like knitting needles and embroidery frames are made by the women themselves or obtained locally. This eliminates high-cost imports, and we often end up with technologies that are finely tuned to local conditions. On the higher-tech side, in 2007 we developed a management information system using Oracle software to handle our production processes. We worked with a local IT company, ATI, and an expert volunteer from the Netherlands, who stayed with us for one month to ensure that we had developed a solid structure for the system.[17] When we introduced this system, our order processing time dropped from over four hours per order to just a few minutes—enabling us to handle many more, and more complex, orders. The system has evolved over time and has been vital for our growth. Written with the future in mind, it contains elements we are not yet using but expect to one day. For example, the rural centers could have access to the system to inform us about the products they are sending back to Dhaka. Getting IT to function in rural Bangladesh has not happened as quickly as we would have

liked, however, and is still not workable. We see now that when this technology reaches rural Bangladesh it will come via smart phones.

Mobile phones are also key to the method we use to transport our raw materials and finished products on the bus system. All our packed-up parcels are transported around the country on top of public buses as unaccompanied baggage. When our packages are checked in at the bus station at either end of the journey, a mobile phone number is provided with them. Once the packages reach the destination bus station, an employee comes to collect them; what identifies him or her is a missed call on the mobile phone number registered with the goods. In nine years we have never lost a package on the Bangladeshi bus system—though we have lost several through international couriers and shipping agents.

In addition, we have recently started to use video to teach supervisors and workers how to make new products. This work is still in its infancy and I suspect it will grow enormously. For new products that involve a new technique and a particular way of doing something, I make a five-minute video of the technique and send it to our highly skilled sampling team at the Dhaka head office. They can then learn by seeing. This is very effective because they can learn at their own pace and refer back to the video at any time.

We are also interested in using mobile payments. BKash, a mobile payments system and joint venture between BRAC Bank Ltd, Bangladesh, and Money in Motion LLC, U.S.A., is the leading system in Bangladesh, but it is still relatively new. The costs per transaction are reasonable, but the cost to cash out (remove

money from one's mobile account) is still relatively high per transaction. Since not enough local traders accept BKash as a form of payment, the cash-out option is currently a constraint. However, I expect that this will change shortly. As soon as it becomes cost effective for our employees, we will move to a mobile payments model.

MOVING FROM PRIVATE LABEL TO BRAND

When we started Hathay Bunano in 2004, we made products to be sold under other people's brands, including Lark Designs in Australia, Urchin and Jojo Maman Bebe in the UK, and Tom Tailor in Germany.

By looking at the garment industry, we had identified an effective and low-risk strategy: ask for product specifications from companies and make their products to order. When the global economic crisis of 2009 hit, I expected to see no growth for the year. So, to make the best use of my time, I decided to stop marketing and instead worked on developing our own brand. We launched our Pebble brand in January 2010. We were able to convince some of our existing buyers to become wholesalers for Pebble. For example, in the UK, we had been making toys for Best Years Ltd.; when we offered them the opportunity to wholesale our new Pebble brand, they were delighted. The company was already attending six trade shows a year, so Pebble grew rapidly in the UK, taking advantage of our wholesaler's existing customer base. Similarly, in Australia, Funkid had been buying Lark products, which we were making; when I approached them with the opportunity to wholesale Pebble, they were delighted. These were the first two wholesalers for Pebble. We now have wholesalers in the UK, Australia, the U.S., Canada, New Zealand, Japan, Singapore, Hong Kong, the countries of Scandinavia and the Benelux, Germany, France, Portugal, Spain, Switzerland, Hungary, Turkey, and Croatia.

In 2012 we developed the strategy further. Understanding that our smaller European wholesalers needed quicker delivery of smaller quantities, we decided to incorporate a company in the UK—Pebblechild UK Ltd.—and set up warehousing facilities there. We can now deliver to our European wholesalers—and to European retailers—in five to seven days. Given the currently difficult economic environment in Europe, this flexibility has made Pebble even more attractive as a suppler because both wholesalers and retailers need not tie up as much capital in stock. We have since set up a similar warehousing operation in Malaysia near the border with Singapore to supply Asian buyers. The year 2013 has seen significant political disruption in Bangladesh, which is likely to continue at least to the end of the year; our strategic warehousing facilities have let us weather much of this disruption.

While Hathay Bunano has moved from private-label manufacturing to manufacturing under its own name, our private-label history has been an important part of our growth and an important example of how to achieve low-risk growth within this sector. Our private-label work enabled us to grow and develop a reputation for quality, consistency, and timely delivery, which we were able to take with us to Pebble. When we launched Pebble as a brand in January 2010, it was not entirely new to retailers: many had been stocking Hathay Bunano products and were happy with them. If we had started out as Pebble, without going the private-label route, it would likely have taken longer to achieve the same growth.

In fact, we see ourselves as making a contribution to (re)branding Bangladesh itself. Our Pebble children's items are proudly labeled "Made in Bangladesh," with tags that include a Bangladeshi flag.

A special line of animal toys—including the Bengal tiger, Tokay gecko, owl, and otter—not only embodies the country's animals, but aims to create a more human link to the young women artisans who created them. Through these efforts, we are trying to rebrand the "Made in Bangladesh" label away from its current associations with low-cost clothes made in less-than-ideal working conditions towards a new model that provides decent jobs for the poor in a country with a proud tradition of both handicrafts and social businesses.

FINANCIAL AND ORGANIZATIONAL MODEL

In 2004, we registered Hathay Bunano as a nonprofit organization, although we have always operated like a business; from our first year, we were profitable and continually reinvested our income. Thus we followed Yunus's definition of a social business. We have grown in this way without external investors or debt. Part of my motivation was to demonstrate that it is possible to create market-driven rural employment in Bangladesh without donor grants or bank loans, which are often hard for start-up entrepreneurs to get. In fact, we even turned down offers of investment so that we could prove our concept.

By 2011 we were exporting so much that we could not really remain registered only as a nonprofit so we established Pebblechild Bangladesh Limited as a for-profit company in Bangladesh. All of our products are still made by Hathay Bunano (the nonprofit) and all training is conducted through our nonprofit arm, but all exports now move through the for-profit Pebblechild. The warehousing and distribution units we have set up in Malaysia and the UK are both registered as for-profit companies. So we started out as a single nonprofit organization and have now become a non-profit and three for-profit companies.

Since we have not taken on debt or investors, we face no outside pressure to engage in regular monitoring and evaluation. In the future, however, our profit-making companies will likely seek strategic investors so they can grow to the next level. Going forward, with the business more financially comfortable, we will invest in quantitative monitoring and evaluation as part of our annual reporting. In the past, to grow organically with scarce resources, we placed higher priority on creating jobs than on engaging in regular and systematic monitoring and evaluation. A number of third-party journalists, multilateral organizations, researchers, and doctoral students have examined our operations over the years and have published their findings on the impact we are having on young women's lives.[18] In addition, our blog and website regularly feature case studies of women who work with us.

The findings of these third-party observers, plus our own experience, show the clear changes in the lives of our employees and their communities over time. When rural manufacturing centers are first set up, any observer can see, from the flip-flop sandals outside the door, that the women are very poor. But if they visit again a few months later, they see a row of nice sandals outside. When we visit young women in their homes, we can see tin roofs added to houses and more babies born in clinics rather than at home. When a new center is set up in a village, it is just a building in the village. But a few months later it will be surrounded by little shops and stalls selling all the things these women might need and want to spend their money on. And, over time, we have clearly seen the difference that better nutrition has made to families and entire communities.

WHAT CAN OTHERS LEARN FROM THE HATHAY BUNANO MODEL?

Hathay Bunano draws equal inspiration from two sources: the efficiencies, economies of scale, market orientation, and global reach of the garment sector; and the focus on poverty alleviation, women's empowerment, and economic development of social-sector handicraft projects. Although researchers discuss how hybrid social businesses like ours form and the unique challenges they face,[19] they have not yet discussed the potential for successful hybrids to creatively disrupt both the traditional business sector and the traditional NGO-sector organizations from which we drew our initial inspiration. Here, Hathay Bunano is an important example because it can positively disrupt both the garment sector and the handicraft sector in the country.

Garment Industry

For the garment industry, instead of the capital-intensive, centralized urban production model, Hathay Bunano has pioneered a large-scale, geographically disbursed, low-overhead rural production model. The wages we pay are excellent in the village context, but still relatively low by global labor standards. Our rural production centers are in low-cost rented buildings (our first one cost $4/month) with clean concrete floors, corrugated tin walls and roofs, and adequate light, ventilation, and working space for about 50 to 100 young women at a time.[20] Our centers operate without the need for electricity, further reducing manufacturing costs. Renting from community members eliminates capital investment and is a good way to elicit community support. Our low-cost model can, in some cases, outcompete machine-manufactured items in both price and quality. We believe garment manufacturers could use it profitably, if they examine their entire production process and identify which components could be made in rural areas. This could help create much-needed decent jobs, and also potentially save companies money and improve their reputation with international buyers.

Handicraft Industry

For the rural handicraft sector, consider that innumerable small-scale social ventures are started around the world every year with the aim of generating much-needed income for youth. Overwhelmingly, however, these well-intentioned ventures stay small and unconnected to international market preferences and economies of scale. To reach scale and generate maximum income and benefits for artisans and employees, handicraft ventures must focus on the market, implement quality control at every stage, build their brand, and adapt to change. Focusing on the market means focusing on what the customer wants and meeting that demand. We have an eight-stage quality control process, as shown in Figure 1. By building a brand and making market connections, we are better able to compete on quality and avoid the trap of low-cost production. Handicraft ventures should also be willing to constantly evolve, adapt, and transform as they grow and respond to changes in the marketplace and new technologies.

LESSONS WE HAVE LEARNED

Hathay Bunano will celebrate its 10th anniversary in 2014. Over these years of experimentation and growth, we have learned several important lessons.

Maximize social sourcing from young women in rural areas.

High levels of unemployment in rural areas represent a tremendous waste of productive resources and capabilities, including the skills of young women. By taking work to the villages and outsourcing the tasks that women and disabled individuals can do in rural areas, we can maximize employment for disadvantaged workers and artisans while generating business advantages. Tasks that can be done in villages should be done there, and tasks that should be outsourced to high-end professionals in wealthy regions should be done there. That system lets the business succeed so we can create more jobs for the poor.

Create jobs that are good for individuals and communities.

Not all jobs are created equal. Some do much more for the individuals, their communities, and the economy than others. With creative thinking and innovation, win-win solutions can be developed that improve working conditions, increase competitiveness, and enhance our reputation in international markets.

Develop pride and local ownership.

The motivation of the women artisans is important. Since they rarely see the final product on store shelves, we go out of our way to share with them the glossy catalogues and high-quality studio shots and magazine spreads of the products they have made. This creates great motivation for them to take pride in their work and continuously improve quality and consistency.

Local workers at rural production centers should feel ownership of their facility. Though we are paying rent and securing the buildings, the women feel it is their space. This is not a donor-funded project giving something away. Here the artisans take ownership of their work and their performance; this is very important in producing consistently high-quality work. Quality should come from positive reinforcement, not punishment. All people need the opportunity to produce a good piece of work, to feel good about that piece of work, and to be proud to submit it. Local ownership also leverages the women's problem-solving skills. They may be poor, but they are not stupid. Living their lives in difficult situations has taught them a resourcefulness that can be mobilized to build a business effectively.

Avoid founder's syndrome.

Maybe a founder can communicate effectively with 50 or 100 people, but scaling up a business requires processes and people. Managers need the space and opportunity to develop and make mistakes. To bring a business to scale, the founder must make herself redundant.

FINAL THOUGHTS

In Bangladesh, where 40 percent of the population lives on less than a dollar a day, creating manufacturing jobs to reduce poverty is imperative. Our model has the potential to creatively disrupt parts of the ready-made garment industry, as well as local handicrafts sectors. To have the maximum impact on poverty, jobs must offer choice, flexibility, and respect. They must enhance the social fabric, offer opportunities for promotion and capacity-building, and be physically safe. When they are, they can better provide essential economic opportunities for young women. Flexible employment has enabled the young women we work with to rise out of poverty by earning additional income for their families; they also enjoy a better quality of life. For these young women, employment has reduced their need to migrate to urban areas, empowering them, enabling them to gain more education, even higher education, and reducing the rate of early marriage. Working with multiple rural units has far more social impact than urban production and significantly reduces economic migration. Creating work that women can walk to quickly from home not only helps support families but keeps them together and stems the tide of economic migration. We have been able to scale our business model because we have allocated tasks to the parts of the global value chain that can most benefit the organization as a whole. But with innovation, we can genuinely alleviate poverty in ways that are not only financially profitable, but socially and competitively advantageous.

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2. Statistics from the Bangladeshi NGO, Acid Survivor's Foundation: http://www.acidsurvivors.org/Statistics
3. International Finance Corporation, *IFC Jobs Study: Assessing Private Sector Contributions to Job Creation and Poverty Reduction.* Washington, DC: IFC, 2013.
4. IFC, Jobs Study.
5. S. M. Hsiang, K. C. Meng, and M. A. Cane, "Civil conflicts are associated with the global climate," *Nature* 476, no. 7361 (2011): 438-441; World Resources Institute, *World Resources 2005: The Wealth of the Poor*. Washington, DC: World Resources Institute, 2005.
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7. A. Karnani, *Fighting Poverty Together*. New York: Palgrave Macmillan, 2011.
8. Also see G. Pfitzenmaier, "Bringing Work to the People," in *The Global Compact International Yearbook 2010*, New York: United Nations, 2010: 124-125.
9. Also see W. J. Werner, "Corporate Social Responsibility Initiatives Addressing Social Exclusion in Bangladesh," *Journal of Health, Population and Nutrition* 27, no. 4, 2009: 545-562.
10. See Werner, "Corporate Social Responsibility Initiatives."
11. K. Harji, H. Best, E. Essien-lore and S. Troup, *Digital Jobs: Building Skills for the Future*. New York: Rockefeller Foundationm, 2013.
12. We currently have three catalogues: our main catalogue, plus one for 100 percent organic cotton

items and one for Christmas.

13. People's Republic of Bangladesh, *Moving Ahead*. Dhaka: Planning Commission, Government of the PRSP, 2008.
14. The industry employs about 3.6 million people out of a total workforce of 74 million. It is responsible for 80 percent of the country's exports by revenue and 17 percent of GDP. About 20 million people rely on incomes from the sector.
15. All of our toys undergo the required safety testing regulation for Europe: European Standard EN71 parts 1 (physical properties), 2 (flammability) and 3 (heavy metals).
16. Oeko-Tex is the world's most stringent testing for dyes and chemicals in textiles; it entails annual random testing and the periodic submission of samples. Seee www.oeko-tex.com
17. These experts from the Netherlands were from the PUM program which sends senior business experts to volunteer on development projects. See www.pum.nl/
18. See, for example, Mark Dummett, "Taking Jobs to Bangladesh's Poor," BBC News, April 30, 2009, available at http://news.bbc.co.uk/2/hi/south_asia/7897097.stm; Rahman, "Hathay Bunano Proshikhan Society (HBPS)"; Werner, "Corporate Social Responsibility Initiatives"; Pfitzenmaier, "Bringing Work to the People"; and M. H. Rahman, "Creating Flexible Jobs for Rural Women in Bangladesh: The Case of Hathay Bunano," *Journal of Asia Entrepreneurship and Sustainability* 8, no. 2 (2012): 149-170.
19. See J. Battilana, M. Lee, J. Walker, and C. Dorsey, "In Search of the Hybrid Ideal," *Stanford Social Innovation Review* Vol. 10 (2012).
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Nell Merlino

Cracking the Glass Ceiling and Raising the Roof

Innovations Case Narrative:
Count Me In for Women's Economic Independence

My entire career has been about women and girls: inspiring them, making them more visible, and enhancing their economic opportunities. In 1992, I created Take our Daughters to Work Day (TDWD); in 1999, I launched Count Me in for Women's Economic Independence (CMI), to reach women and girls with messages and programs that promote economic empowerment. CMI is the leading national not-for-profit provider of resources, business education, and community support for women entrepreneurs seeking to grow micro-businesses into million-dollar enterprises.

To me, these efforts are a natural progression in the women's movement. Once we won human and legal rights for ourselves, financial independence was the logical next step. This is because girls learn everything from watching women, including watching them be active, successful players in the economy. These decades of momentous change in women's economic lives have been exhilarating. Quite simply, women and girls are now critical players in the global economy; as a 2009 report from Boston Consulting notes, the $20 trillion of consumer spending currently controlled by females could reach $28 trillion over the next five years.[1] The economy relies on women's ability to make and spend money.

And that is why women must do everything in our power to show girls by example how to make, save, give, and invest money. The issue is no longer cracking the proverbial glass ceiling; we've done that mightily. Now we must raise the roof altogether and expand the pie to make room for all the innovation and creativity that women and girls can bring to the global marketplace. The four women I profile here are examples of how we do that, and their stories embody several crucial themes: growing one's self-esteem after being abused, drawing on military experience to succeed in business, and the importance to women of role models, mutual support, inspiration, publicity, and financial guidance.

Nell Merlino is Founder and President of Count Me In for Women's Economic Independence, the leading national not-for-profit provider of resources for women to grow their micro businesses into million-dollar enterprises.

Case Study 1: C. J. Scarlet

C.J. recently received a $20, 000 scholarship to attend Singularity University, co-founded by Peter H. Diamandis, the Intel entrepreneur and chairman of the X PRIZE Foundation. Singularity's mission is to figure out how to use technology to make positive change. That is exactly what Scarlet is doing with her tech company, 10 for Humanity, which aims to reduce acts of violence worldwide by 10 percent in 10 years. She will do that.

Scarlet, 52, a former photojournalist with the U.S. Marines, spent five years in the military and was sexually assaulted by her recruiter. For nearly 20 years, she has been a volunteer and professional advocate for victims of violence, and she has earned an interdisciplinary master's degree in human violence.

In January 2013, she happened upon *Abundance: The Future is Better Than You Think*, by Peter H. Diamandis and Steven Kotler. As she read the book, she began to wonder how to use technology to prevent violence. Then she remembered that she had actually done that in 1997, as the Director of Victims' Issues at the North Carolina Attorney General's Office. She initiated and co-chaired the implementation of SAVAN, the nation's first statewide automated victim notification system, which notifies crime victims before their perpetrators are released from custody. SAVAN was selected as the national model by the U.S. Department of Justice, won several awards, and is still in use today.

Still, to her frustration, "I was always addressing violence after it occurred, when what I really want to do is to keep it from happening at all." She realized that to make that change happen, "someone has to start the process." She decided that she should be that person.

Scarlet knows what it's like to dust herself off and roll up her sleeves. In 2002, doctors told her that her lupus and scleroderma had caused pulmonary hypertension and would soon kill her. Devastated, she sought counsel from a Tibetan lama. He told her to stop feeling sorry for herself and start thinking about other people's happiness.

So she did. She started small, giving up a coveted parking spot, say, or handing a stranger her cane. "I became more grateful for what I had and focused less on my own suffering," she says. "I learned that the keys to a happy life are gratitude and generosity."

Eighteen months later, her condition went into remission. The lama then ordered her to write books and give lectures about what she had learned that had transformed her life.

And that is exactly what she is doing with 10 for Humanity. In the fall, she and her team will kick off a global crowd-sourcing campaign, inviting people to submit ideas to prevent violent crime. "Then we'll take the most marketable and turn them into products and get them on the market," she says. "I'm talking more than stun guns and pepper spray."

MOM BRINGS HOME THE BACON

My first foray into the world of women's financial independence came in 1992, when the Ms. Foundation for Women asked me to help create a program to boost girls' self-esteem. I had been working in politics, doing marketing and public relations for presidential campaigns and social issues. A year earlier, around the 10th year of the AIDS epidemic, I'd done a program, "Ten Days Ten Deeds," that had generated global media attention. The foundation had seen "Ten Days Ten Deeds" and wondered: how can we draw attention to girls in a new way that will bolster their self-esteem?

I met with representatives of the foundation, and they give me a carton of research to read. It was so depressing! There we were, 25 years into the women's movement, and girls were still feeling deflated and suicidal.

I very much wanted girls to be seen in places other than where you'd expect them: at school, at home, at the mall. At the time, people didn't associate girls with the workplace, but I knew that kids like to see where their parents go every day. My father was a lawyer and leader in the state legislature in New Jersey, and I loved going to work with him. I witnessed him helping people and changing things through hard work and force of personality. My mother was a painter and worked at home. Both of my parents were happiest when they were working.

I envisioned the New York subway filled with girls at rush hour, so adults would see the future workforce right next to them. I went back to the foundation with a five-page proposal called "Take Your Daughter to Work." They liked it, but were afraid that girls would mostly go into offices and see women in clerical roles—where many were. I said, "If that's true, they need to see that so they can make different decisions about their future in the workforce."

Early in my relationship with the Ms. Foundation, Gloria Steinem, who was also the editor of *Ms.* magazine, a leader and a role model for so many women, stopped by the office. She looked down at the proposal, took out her pen, and changed the word "Your" to "Our," so it became "Take OUR Daughters to Work." That was it. Then she said, "I'm going to lunch with the publisher of *Parade* magazine, and if he asks me what's new, I'll tell him this." Within a month, he had run a quarter-page article about it. We received 10,000 letters from that one piece. Since that time, TDWD been reproduced in 13 countries and is now a yearly event. In 2003 boys, were added into the mix (Take our Daughters and Sons to Work Day), so children of both sexes now get to see their parents in action.

The media often get slammed for their negative portrayals of women, but they fully embraced TDWD. Role models are a critical component of change; the culture needed to be flooded with images of girls trying out a range of jobs. That was one of the best ways to change how girls and women were perceived—and, probably more important, how women and girls perceived themselves.

Twenty years after its inception, I encounter young women who tell me that their career aspirations were shaped by going to the office with their mothers and fathers, seeing firsthand the opportunities and challenges that lay before them.

Case Study 2: Kristina Guerrero

A funny thing happened while Kristina Guerrero was packing for a camping trip with her husband, Brandon Sylvester, a food scientist. A passionate outdoors - woman and former Air Force pilot, she often found herself lugging around huge bags of food for her dog, Dunkan. There had to be an easier way, she thought. Why not create a meal/energy bar for dogs?

The couple did some research and found nothing else like it on the market. Soon after, in July 2011, TurboPUP, a line of complete meal bars for active dogs, sprung to life.

The endeavor is completely self-funded; Guerrero and Sylvester do all the cooking and packaging themselves. "We drive from place to place to get people to buy bars," she says. "I have a 2002 Honda Civic with 200,000 miles; the bumper is being held up by a shoestring."

None of this is surprising; Guerrero was never one to sit still. She joined the military at 17—her parents had to sign her permission slip—and got a full ride to the Air Force Academy in Colorado Springs, Colorado. Then she went to pilot training.

"I loved the military," says Guerrero. "The people in the military are the greatest people I ever had the chance to work with. It's your family, your brothers and sisters, and everybody has your back. There's dysfunction, sure, but you work through it."

In 2006, while in the Reserves, she began volunteering as an adaptive ski instructor for people with disabilities—and three years later she started a master's degree in occupational therapy. But being in both a student and a pilot was too difficult, and she left the Air Force in May 2010. She graduated in 2012 with the idea of starting a nonprofit; one of her goals for TurboPUP is to make enough money to fund her philanthropic efforts.

The bars are now available at local retailers and she has two national distributors. Still working as an occupational therapist, Guerrero freely admits that it's not always easy. "There are some days that are really hard and you kind of need someone to bounce ideas off of," she says.

But that hasn't deterred her from her mission: to become a multimillion-dollar organization that can contribute its profits back into society. "Whenever I have an idea, I act on it."

One such young woman is Kristina Guerrero. Once a U.S. Air Force pilot, Guerrero, now 32, first heard of TDWD at age 13, when she went to work with her mother, a dentist. ("My father, a pilot, wasn't allowed to let me fly in the cockpit," she says with a laugh.) TDWD "was huge," she said. "I definitely have a very tangible memory of the excitement of that event. We had so much fun."

I met Kristina at an event for Veteran Women Igniting the Spirit of Entrepreneurship (V-WISE), an entrepreneurial program for female vets based at

Syracuse University's Whitman School of Management. She had read my book, *Stepping out of Line.* She came up to me and said, "You've been influencing my life since I was 13."

I can't tell you how humbled I was to have had such a positive impact on this woman, who spent eight years flying C-130 transport planes—including air medical evacuations under fire—during combat deployments in Afghanistan, Iraq, and the Horn of Africa. And it made me realize once again how important opportunities and positive images of women working are, how one generation truly inspires the next.

A 2012 study from the Girl Scouts, *Having It All: Girls and Financial Literacy*[2], corroborates my point about positive role models. The report's authors interviewed 2,083 girls ages 8 to 17 and their parents. Of these girls, 90 percent said it was important to learn to manage money—but only 12 percent said they felt confident about making financial decisions. They said they learned about money and finances primarily from their moms (85 percent), dads (61 percent), and teachers or guidance counselors (20 percent). Financially confident parents (86 percent) were more likely to teach their daughters about money management and financial literacy. A 2010 Girl Scout report, *Go Ask a Girl*,[3] found that parents had the biggest impact on their daughter's future decisions. Finally, in a 2001 survey by Girls Inc., 50 percent of girls in grades 9–11 said that their mothers or stepmothers taught them the most about managing money—nearly double the 27 percent who said their fathers or stepfathers taught them the most.[4] All this evidence shows us why it's so important that women secure financial independence, and lead their daughters onto the right financial path.

Twenty years ago, having a mom who went to an office every day was something of an anomaly, but today working mothers are the norm. A May 2013 report from the Pew Research Center found that in 40 percent of households with children under age 18, the mothers are the sole or primary source of family income. That's up from a mere 11 percent in 1960.[5]

The Pew study also tells us that women now comprise 47 percent of the U.S. labor force, and the employment rate of married women with children has jumped from 37 percent in 1968 to 65 percent in 2011. Nearly 40 percent of the workforce—that's 5.1 million people—is married mothers who make more money than their husbands (63 percent of that total are single moms). Of all households with children under 18, the percentage of married mothers who out-earn their husbands has gone up from 4 percent in 1960 to 15 percent in 2011.[6] According to the Pew study, the median total family income of married mothers who earn more than their husbands was nearly $80,000 in 2011, well above the national median of $57,100 for all families with children.

Women have certainly cracked the glass ceiling in most, if not all, sectors. American Express OPEN estimated that, as of 2012, there were more than 8.1 million female-owned businesses in the United States generating almost $1.3 trillion in revenue and employing nearly 7.7 million people.[7] Women-owned businesses are present in every sector imaginable, including construction and transportation.

Women not only hold top spots in companies (Marissa Mayer at Yahoo, Sheryl Sandberg at Facebook, Rosalind Brewer, at Sam's Club); they are also top elected officials (former secretary of state and senator Hillary Rodham Clinton, Senator Kirsten Gillibrand of New York, Governor Susan Martinez of New Mexico). In the first quarter of 2013, American women got the right to serve in direct combat—which many female military personnel say has been a reality for years in ad hoc female engagement, or "lioness," teams. But now, at last, military women can go for the top leadership jobs like heading the Joint Chiefs of Staff and can qualify for hundreds of other positions with better pay and veterans benefits.

Women also rule in the sports world. Title IX, which passed in June 1972, protected girls from gender-based discrimination in athletics. Fast-forward 30 years to the 2012 Olympics in which more female athletes participated than in any other Games in history: nearly 5,000 from more than 200 nations. The United States won 46 of those gold medals; 29 of them were earned by women.

Granted, we haven't yet had a woman in the Oval Office, but I have no doubt that will happen in my lifetime.

To paraphrase an old advertisement, women have come a long way—but we still have a lot more to do. The Pew study I mentioned earlier reported that the median income for families led by a single mom was only \$23,000, well *below* the national median of \$57,100 for all families with children.

Most of these are undereducated women of color. To truly get to the next level, we must include more women in the economy at all levels where they will be making a living wage, building sustainable businesses, running major corporations and countries, inventing the next big thing, and investing their money in companies, products, and candidates that help other women.

COUNTING WOMEN IN

After the enormous success of TDWD, what could we do as an encore? I kept noticing the big issue: women's economic independence. That's how Count Me In was born in 1999. We started out as the first online micro lender in the world and made 1,000 loans to women across America. Recently, one of the founders of Kiva told me our early online loan application inspired them.

But we faced a challenge. Despite accounting for 29 percent of all business owners, women-owned businesses only employed 6 percent of the country's workforce and contribute just under 4 percent of business revenues.[8] That challenge led to a new program: Make Mine a Million \$ Business, which aims to inspire a million women entrepreneurs to reach \$1 million in annual revenue. Through multiplatform programs, CMI helps women realize their full economic potential. We hold live and online competitive events and "pitch parties" across the country, and provide women with online resources, coaching, marketing, technology assistance, and a suite of business-building products. To date, 32 percent of the women who have participated in Make Mine a Million (M3) have reached \$1 million in revenues.

But CMI is more than just another economic development program; I think of it as fueling a mindset and a movement that promises to change the U.S. marketplace. The National Women's Business Council reports that women-owned firms have an annual economic impact of $3 trillion.[9] That is, women are creating and/or maintaining more than 23 million jobs—16 percent of all U.S. jobs. But only 3 percent of all female-owned firms have revenues of $1 million or more, as opposed to 6 percent of male-owned firms.[10]

Why is this? One reason is that women tend to run businesses in industries like retail, which typically get less financial support than businesses in other industries. This makes it hard for women to hire more employees. But women's own insecurities present barriers, too. Many women, for example, don't see themselves in the CEO role. Others aren't comfortable being the primary breadwinner in the family—or even making a lot of money.

If women are to have an impact on the current economic recovery, their businesses will have to grow significantly. Since CMI began, corporate America has been recognizing the importance of women's economic empowerment and bringing women into the supply chain. CMI has been sponsored by many global companies that are dedicated to women entrepreneurs succeeding, among them American Express OPEN, AIG, Sam's Club, FedEx, and Dell. Coca Cola recently launched its 5by20 program, which will help empower 5 million female entrepreneurs economically by 2020.

Two years ago, Walmart, also a generous supporter of CMI, invited me to help create its Global Women's Economic Empowerment Initiative, which has three aims: increase sourcing from women-owned businesses, empower women through job training and education, and invest $100 million in philanthropic grants to women's empowerment programs by the end of 2016. It is also dedicated to purchasing $20 billion worth of goods and services from women-owned companies by the end of 2016. No other company has made such a large commitment to that goal.

Walmart has gathered a remarkable group of successful women-owned companies to guide its efforts. Among them are Ariela Balk, founder and CEO of AAI, a lingerie and swimwear company whose brands include Smart & Sexy; Lynn Tilton, CEO of Patriarch Partners, an $8 billion holding company that has saved over 250,000 American jobs; Mary Propes, founder and CEO of MVP Group International, one of the world's largest candle makers; and Martha Montoya, who founded Los Kitos *Produce*, a company of growers, packers, shippers, and marketers of fresh produce.

I'm very proud of my work in this historic effort. Women and Walmart are raising the roof to include women at every level of the supply chain.

Case Study 3: Angela Cody-Rouget

In 2006, Angela Cody-Rouget launched Major Mom, a company that helps people organize their lives. The idea grew out of her personal experience: she spent 18 years in the Air Force, rising to major, and at one point leading more than 300 people.

She never planned to leave the military, but after she had her first child in 2003, the juggling became increasingly stressful. It wasn't easy to leave: "That was my family," she said, and her "loyalties were with them." But when she had children she began feeling that the Air Force "wasn't my future. I didn't want my children to be raised by nannies and babysitters." Then the economy tanked, along with her husband's real estate business; they went "six months without income." That situation forced her "back to the drawing board."

As a new mom of a toddler and a baby, she tried to keep an organized and tidy home. She wasn't the only woman struggling with that challenge. She became certified as a family manager and a professional organizer, and worked as a solo professional organizer.

Three years later, she brought in a partner and began hiring employees. In October 2009, she opened the Major Mom Training Academy, which has now trained 31 apprentices in nine classes. Today, the company has 17 employees in Colorado, and a handful in Phoenix, Spokane, and the Austin area. Eventually she hopes to take the company nationwide.

"I grew the business the old fashioned way: bootstraps, make money, put it back into the company," she says. "It's debt free and has no loans. And we just went out and marketed, marketed, marketed."

She is also adamant about being a good role model for her nine-year-old daughter, Lilyana, and eight-year-old son, Nathan. "I take them to work and teach them how hard I work and make sure they understand that money doesn't grow on trees," she says. "It's something you earn, and it's a pleasure to earn if you pick the right career field."

WOMEN VETERANS JOIN THE MOVEMENT

One group that has especially interested me is female veterans who run their own businesses. They are an underserved group: historically, female vets have had higher rates of unemployment than male veterans and non-veteran men and women.

At last year's Clinton Global Initiative America, Capital One Financial Corporation committed more than $800,000 over three years to launch a new business training program in partnership with Count Me In. Called the Women Veteran Entrepreneur Corps (WVEC), it is a national business growth initiative for women business owners who are veterans or the spouses or domestic partners of veterans. The initiative includes live conferences and competitions, as well as a business accelerator program for qualified women whose businesses gross $50,000 to $750,000 a year. The goal is to help them grow their businesses by at least 30 percent within 18 to 36 months. This will increase revenue and create new jobs in their communities—and also boost their own morale.

In 2012, CMI and Capital One conducted a survey, "Count Me In and Capital One Survey of Women Veteran Business Owners," of 800 women veteran business owners; 62 percent said that their military experience made them more comfortable taking calculated risks in their businesses, and 55 percent said their leadership experience in the military inspired them to start their own company.[11]

None of this surprises me. At a WVEC event in early 2012, we had invited 24 women to submit financial information and business plans—and every single one did so. This is one of the clearest contrasts between military veterans and civilians: Women with military experience have enormous focus and discipline. They are detail-oriented. They are efficient. They will fight to make things work. They know how to think quickly. Their lives, literally, have depended on their making smart decisions under enormous pressure.

They want to be their own bosses, but they also know how to be part of a team. As Kristina Guerrero put it, "Being in the military teaches responsibility, so you own your job. It teaches you how to be part of a team. Whenever you do something, you think, 'How is this going to affect everyone else?' Also, the military is action-oriented. You don't just sit in a room and think all day." For many people, taking action is the hardest part of starting a business. But, as Guerrero puts it, "in the service, we're taught to think about the goal, and how to make it happen." Moreover, "In the military, you're taught from the get-go to speak up … If you have something to say, you'd better say it, because people's lives are at stake. There's no time to think, 'Well, I'm a female.' It was everyone's duty to speak up, or the safety of the team was at stake."

Angela Cody-Rouget exemplifies these qualities, along with the organizational skills one learns in the military. "I've always been very organized and had leadership qualities, but the military taught me so much more," she said. "It taught me about systems and how you can use checklists and operation manuals to be incredibly effective as a team leader."

Guerrero and Cody-Rouget are both part of WVEC, along with other female vets who run small businesses. These include Adrienne Coward, who makes and sells sweet potato pies, and a cyber security and technology firm led by women who had top-secret security clearances. Many of these same women endured sexual abuse in the military and have grappled with PTSD.

But running their own businesses—and empowering themselves to become financially solvent—has helped ease their transition back to civilian life. In the CMI/ Capital One survey, 46 percent of the women acknowledged that it helped. At the same time, 46 percent said they don't have a business plan in place for the next one to two years, which could hurt their growth and profitability.[12]

We expect WVEC will change all that. And Adrienne Coward is another example of how running a business helps a vet with healing, as well as the joy of honoring a role model.

Case Study 4: Adrianne Anderson Coward

Adrianne Anderson Coward of Converse, Texas, spent ten years in the United States Army and was honorably discharged in 1992. She went directly to nursing school to fulfill her lifetime dream of becoming an R.N. She got her degree in 1997, and has been working at a military base since 1999.

She loved her work and found it gratifying, but always wanted to open her own business. And she knew just what she would do: sell her grandmother's sweet potato pie in a jar. She even had the name: Mama Dee's Dessert, after her grandmother, and her 110-year-old sweet potato pie recipe.

"She raised me until I was about seven," Coward says of her grandma, who passed away about 15 years ago. "My mother was 17 when she had me. My grandma had six kids of her own. She would say, 'You are female and you are black, and you have to go to college.' She did not put black first. My grandmother worked two full-time jobs all her life, until she couldn't work anymore."

It was Grandma Dee who taught Coward to cook, and when Coward lost her job, she decided it was time to open her company. The idea is simple: you open the jar and then "just add eggs and milk and bake it," she says. "You get that nice aroma in the house without all the fuss of peeling and mashing potatoes."

Like so many female vets, Coward, who was sexually abused in the military, wants to continue to give back. She plans to donate profits from her company to help women suffering from military sexual trauma and breast cancer.

During her nursing career, she was nominated Nurse of the Year at Brooke Army Medical Center in San Antonio, and assisted in collecting data for the first trauma registry, which helps physicians improve combat care for service members deployed in war zones. She also helped develop a video teleconferencing system to connect recovering service members with health-care providers currently deployed in Afghanistan.

Coward has shown that same fearlessness and innovation in her business career. Not long ago she linked up with Heritage Specialty Foods, a Dallas company that sells pumpkin pies in a jar. "I just called up the CEO," she says. "Why not?" The two companies are now working together; Coward also sells her confections at farmers' markets. Her goal is to make the product a staple in homes around the country. "When people think about Mama Dee's, they think about sweet potato pie," she says.

A CALL TO ACTION

When we launched M3 at the National Press Club in 2006, Hilary Rodham Clinton was in the same room, supporting and lauding our efforts to help women business owners. In June of this year, she mentioned Capital One and WVEC during a rousing speech at the Clinton Global Initiative America. In her speech, which was largely about improving the future of women across the globe, she called for women to continue to fuel the economy.

How do we do that? The same way we've been doing it: by extending a hand to the woman who sits next to us, above us, below us, all along the supply chain from farm to table to board room to state house. By welcoming women from all sectors of business as employees, soldiers, and future leaders. The point is not just helping women fight for their own companies; it is showing girls a future where we are all part of the same team, moving women and their families forward.

The situation cries out for women and girls to buy from women-owned companies. To hire women. To promote them. To nominate them to board seats. To be mentors and role models.

Indeed, in my many years of working with women business owners on their leadership skills, I have seen the value in involving successful women CEOs as experts willing to share their expertise. Of course, women also can learn from men and be led by them. But for many women and girls, seeing someone who looks like them in a position of power and success makes all the difference. In those role models, women and girls see that they can be themselves, make more money, and build a thriving organization if they choose.

That is how we raise the roof.

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Shai Reshef

Going Against the Flow in Higher Education
Deliberately Including those Previously Excluded

Innovations Case Narrative:
University of the People

If everyone actually had the opportunity to obtain a university education, the world would be a different place.

I believe this so strongly that, though I could have retired in 2009, I chose instead to found University of the People (UoPeople): the world's tuition-free, non-profit, online, degree-granting academic institution dedicated to opening access to higher education globally. UoPeople is specifically designed to provide access to college studies for qualified high school graduates, despite financial, geographic, societal, or personal constraints.

We are proud to say that our institution has eliminated almost the entire cost of higher education. Three key innovations allow us to function effectively on a limited budget without sacrificing the quality of education: we embrace collaborative learning, we use Open Educational Resources and open source technology, and we get excellent assistance from approximately 3,000 registered volunteers. By opening the gates of higher education to a globalized student body while limiting operating costs, we are building a scalable model that can be duplicated by governments and universities to show that delivering quality education to masses of people need not be expensive. This model is especially relevant for governments in developing countries that want to reach citizens who would otherwise be left uneducated. Instead of building a traditional brick-and-mortar institution, an elite equivalent to Harvard, developing country governments can turn to quality online education based on resources like ours and thus serve thousands of individuals, offering the courses, especially in computer science and business administration, which will help them find good jobs.

UoPeople's financial model is simple. While our institution is tuition-free, we do ask students to make modest financial contributions to their education. In our tuition-free model, we do not charge for the cost of instruction, books, teachers, or

Shai Reshef is the founder and President of University of the People (UoPeople).

annual enrolment. All we ask of our students is that they cover the cost of processing their applications ($50) and examinations ($100 per end-of-course exam). There are no other costs whatsoever. For those who cannot afford even these nominal fees, UoPeople offers scholarships such as the Hewlett-Packard Women Scholarship Fund, the Intel Haitian Women Scholarship Fund, and the Micro-Scholarship Portal, the first of its kind at any university, which facilitates micro-donations from the public.[1] We offer all of these scholarships to remain consistent with our mission and ensure that no qualified student is excluded for financial reasons. Our mission is to offer higher education to all, and to ensure that all qualified students have the opportunity to study towards an academic degree, whatever their financial situation.

According to UNESCO, given the growth of youth populations worldwide, by 2025, an estimated 98 million youth will be hoping for places in universities that simply do not exist.

Since we launched in 2009, UoPeople has partnered with Yale University to conduct research, New York University to accept our students for further study, and Hewlett-Packard, as part of its Catalyst Initiative, for internships. To date, we have admitted more than 1,500 students from 136 countries around the world; many had no other alternative. The University has gained the support of leading academics; among them are New York University President John Sexton, Academy of Paris Rector Emeritus Mrs. Michèle Gendreau-Massaloux, Indian Institute of Technology (ITT) Bombay Director Devang Khakhar, Oxford Vice-Chancellor Sir Colin Lucas, Rhode Island School of Design President Emeritus Roger Mandle, Barnard College President Emeritus Judith R. Shapiro, and George Washington President Emeritus Stephen Joel Trachtenberg. They all serve on our President's Council. UoPeople has amassed over 1,250,000 followers on Facebook and garnered media coverage throughout the world. Student satisfaction is high. Each term, we ask students if they would recommend UoPeople to a peer—and 95% say yes.

Thus, we have created a viable solution to the pervasive problem of access to education.

The problem of educational access knows no country borders and is found in every region on earth as financial, geographic, placement, social, and personal constraints are widespread and youth populations grow. According to UNESCO, given the growth of youth populations worldwide, by 2025, an estimated 98 million youth will be hoping for places in universities that simply do not exist.[2]

This narrative informs the successful launch and implementation of a solution to a pressing world crisis. Not only has it changed 1,500 lives in four short years, and built the infrastructure needed to serve masses of students with quality degree programs; critically, it also serves as a model for governments, communities, and universities throughout the world. At this moment in history, having completed its technological development and demonstrated the quality of its courses, it is entering the next phase, and preparing to scale up rapidly.

THE ORIGIN OF UOPEOPLE

My personal journey from for-profit to retirement to non-profit developed during the 20 years I worked in for-profit education. I was responsible for educational programs for hundreds of thousands of students from kindergarten to university level. Among other efforts, in 2000 I started the first online university outside the United States, in the Netherlands, to deliver online degrees for the University of Liverpool, in Great Britain. In a unique collaboration of private and public education, this venture acquired the rights to deliver—from the Netherlands—online courses for University of Liverpool degrees. This for-profit concept was a great success, and showed me how powerful online learning could be. Students from all over the world were staying at home, continuing with their jobs, and meanwhile getting a wonderful European education.

But deep inside I felt unsettled: I knew that most people couldn't afford the high tuition fees at Liverpool. Online learning was wishful thinking for many—it was simply too expensive. Having worked my way to success through education, I knew first-hand the exciting opportunity of education pitted against the sting of financial struggle.

Understanding when to make a successful exit was crucial; I sold that online university and my other businesses and went into semi-retirement. But retirement wasn't for me; I wanted to continue helping develop online education. I was finally in a position to truly give back and create a mechanism capable of making an impact. To me, the only way to change the world is through education: when you educate one person, you change a life, but when you educate many you change the world.

With this mantra in mind, I decided to try and open the gates to higher education for everyone in the world. This sounds like a lofty goal, but I realized that much of what we needed was already out there for free. Open source technology is available for everyone to use for free. Open education resources are content that people have created and put on the Internet for everyone else to use. Add in the new Internet culture of social networking—where people share, teach, and learn from each other—and the whole system is available free of charge. All I had to do was combine these sources into a viable technology model for online education. And so, UoPeople was born.

When I announced the University I didn't know what would happen. I only knew that it was a potentially high-impact idea and hopefully people would help out. In my wildest dreams I didn't know it would gain the outstanding momentum and support it did.

In January of 2009 at the Digital-Life-Design (DLD) Conference in Munich, I proclaimed the idea of the University. The same day, an article in the *New York Times* described the idea. In response to the announcement and article, hundreds of individuals sent emails expressing their desire to help. Volunteers were approaching the University, rather than the University actively seeking them out. If an individual couldn't volunteer personally, he or she introduced friends who wanted to get involved. This was the situation when I met Dr. Dan Ariely at the DLD. He valued the concept, and its ability to help those who are otherwise excluded, and recommended that I approach Dr. Russell Winer to become UoPeople's Dean of Business Administration. In turn, Dr. Winer recommended Dr. Alexander Tuzhilin to become UoPeople's Dean of Computer Science. Dr. Tuzhilin then recommended Paul Affuso to become UoPeople's CFO. Essentially, UoPeople's volunteers were begetting volunteers, creating a snowball effect of extraordinary momentum.

When you educate one person, you change a life. When you educate many, you change the world.

Following this pattern, I met John Sexton, president of New York University, at a conference where he offered his help. He then actively recruited members of our Presidents' Council, which he now chairs, and that was only the beginning of his support .

But it is the support of our volunteers that is truly the foundation of the University. I have been continuously astonished by the amount of goodwill from individuals willing to donate their time and networks to help provide education to others in need. The entire core of the University, since our launching, is driven by the enthusiasm of our volunteers, most of whom continue with us for long periods of time.

Our volunteers remain committed because they know the importance of education and the emergency the world is facing. Indeed, the value of education may seem obvious, along with the severe problem of access, but they bear elaboration, as they are crucial to what UoPeople accomplishes daily. The details of the global educational crisis are as fascinating as they are sobering.

THE CHALLENGE OF EDUCATIONAL ACCESS

Education impacts not only the lives of individuals—their income, health and quality of life—but also the societies in which they live.[3] Crime rates, social awareness, economic stability, and sustainable development are often tied to the ability to access education.[4] Education also leads to other social benefits, such as a more socially engaged and informed citizenry, lower child mortality, and better child health.[5]

Yet the United States and other countries continue to face daunting challenges in providing access to higher education. In the United States, in particular, the cost of higher education creates a significant barrier to equality of access.[6] In this country, a student's family background, and racial and ethnic group or legal status, also appear to significantly determine access to college.[7] These disparities in access result in fewer low-income people, African Americans, Hispanics, and American Indians holding degrees. There is also a massive gap between the overall number of degrees that will be produced and the number of jobs requiring postsecondary education. It is estimated that this shortfall will reach 23 million by 2025.[8]

Many studies have established the correlation between improved employment outcomes and higher salaries and postsecondary education.[9] Therefore this gap not only represents the 23 million people who cannot attain higher education degrees. It also speaks, in stark terms, of the millions of people who will be unable to improve their socio-economic status and the generations of Americans who will be unable to pave a pathway out of poverty. As the United Nations has noted, "Education is the primary vehicle by which economically and socially marginalized adults and children can lift themselves out of poverty and obtain the means to participate fully in their communities."[10]

Indeed, it seems clear that education is a primary means for individuals to lift themselves out of poverty and improve their socio-economic status. Yet today's employers not only demand that their employees possess the requisite knowledge and skills, but that they hold degrees from an institution that provides quality education, a term that is rapidly becoming synonymous with online learning. In fact, online learning, particularly in higher education, is increasingly becoming the new way to learn. Already in the United States, more than 7 colleges in 10 are equipped with full academic programs online. In fall of 2011, more than 6.7 million U.S. students—a full third of those in postsecondary education—took an online course, and at 32%, the proportion of all students taking at least one online course in 2011 was the highest in the last 10 years.[11] Thomas Friedman, in the *New York Times,* recently referred to this growth as a "budding revolution in global online higher education."[12]

Hence, what has changed recently is the notion that quality education can only come from a physical institution. Technology and online education are changing the way we deliver education, and the way we learn. They are providing the capacity to offer quality education to those who would otherwise be left behind.

I often wonder why the Internet was invented, if not to distribute quality education to every single person on earth. Education is simply the single best use of the Internet. We can bring all the knowledge available to students wherever they are, and deliver it in a meaningful way. This is exactly what UoPeople is doing, as evidenced by the milestones the institution has reached to date, shown in Table 1.

University of the People's Milestones

January 2009: UoPeople is launched.

April 2009: Enrolment opens.

May 2009: United Nations welcomes Shai Reshef and University of the People.

May 2009: Fast Company names Shai Reshef to its list of the 100 Most Creative People in Business.

September 2009: Classes begin.

December 2009: Shai Reshef is inducted into the International Ashoka Fellowship.

August 2010: Clinton Global Initiative grants membership to Shai Reshef on behalf of UoPeople.

November 2010: The UoPeople Haiti Project begins; UoPeople commits to educating 250 Haitians for free.

March 2011: UoPeople extends its global reach by admitting students from more than 115 countries.

June 2011: New York University announces collaboration with UoPeople; it will accept high-achieving UoPeople students.

June 2011: HP and UoPeople partner to offer internships for UoPeople students through the Catalyst Initiative.

November 2011: UoPeople partners with a technology center in Ramallah, West Bank.

January 2012: The Ewing and Marion Kauffman Foundation grants $200,000 to UoPeople.

May 2012: The presidents of NYU, Oxford, George Washington University, and other institutions unite behind UoPeople as members of the President's Council.

June 2012: The Bill and Melinda Gates Foundation grants $500,000 to UoPeople.

July 2012: UoPeople introduces its Women Scholarship Fund: Hewlett-Packard pledges $200,000 to educate and mentor 100 women.

August 2012: Hewlett-Packard donates computers to UoPeople's offices and a student computer center used by UoPeople students in Haiti.

September 2012: Google for Non-Profits grants $500,000 to UoPeople.

April 2013: Western Union creates a scholarship fund for UoPeople students.

April 2013: Hewlett-Packard donates $200,000 towards UoPeople's accreditation efforts.

April 2013: UoPeople launches innovative Micro-Scholarship Portal, enabling individuals to donate to specific students in need.

THE LIMITS OF MASSIVE OPEN ONLINE COURSES

In the past ten years, we have seen a proliferation of Open Educational Resources (OER): freely accessible and openly licensed documents used for educational and research purposes. This growth has helped many institutions and individuals learn and gain applicable knowledge—and it has enabled UoPeople to base its entire operations on OER. The recent growth in courses offered online, including massive online open courses (MOOCs) offered by leading universities, testifies to the interest in learning online globally.

However, the enormous interest in MOOCs is coming from existing students. According to Daphne Koller, founder of the MOOC Coursera, 80% of Coursera students already hold degrees, and half hold postgraduate certifications. This implies that people are not using the open access to MOOCs to begin getting a university education; instead, people who already have degrees are adding to their existing knowledge.[13] Furthermore, on average, under 7% of students complete MOOCs.[14] So, if only 7% of registered students, people already experienced with higher education, are finishing MOOCs, how can we expect that those who are just starting out as undergraduates can complete MOOCs without any support? Who will serve these individuals who need the chance at a supportive college education, given that MOOCs apparently cannot do so? Are we creating a situation where the haves are getting more and the have-nots are being left further behind by the illusion that they can get an education for free without support?

Unfortunately for the underprivileged around the world, MOOCs are simply not structured to accommodate the unique demands of those who need to catch up. They need a combination of student services and instructor oversight to help them succeed—and it must be affordable. Our model was designed to accommodate students who deserve a chance, not just to have access to affordable knowledge, but to obtain the necessary support, through academic advising, that will allow them to complete their degrees. Students who enrol at UoPeople complete a cohesive, coherent program and study in small groups of about 20 to 30 students, with dedicated instructors providing guidance, assistance, and personalized attention. UoPeople offers a full curriculum; much like any liberal arts college, it offers courses in Arts and Sciences to supplement the programs in business administration and computer science that each student chooses. Support is offered students in the areas of student services, student affairs, and academic advising. In short, we provide a structured degree program with the learning outcomes of each course tailored to the overall aims of each degree program, and with a full suite of support services for students—what they need to succeed from start to finish.

UoPeople uniquely demonstrates how OER and online learning can not only further an individual's knowledge, but also lead to a degree. Thus, it illustrates the potential to equalize access to knowledge, providing students the opportunity to earn a university degree, regardless of nationality, gender, socio-economic or other status.

To apply to UoPeople, applicants must be 18 or older, demonstrate they have a high school diploma, and be proficient in English, as all coursework is in English. These are the only set requirements. We tell students, if you can demonstrate that you have a recognized high school diploma and sufficient knowledge of English, then come on board. Our gates are open to everyone. We believe that everyone has the right to higher education and deserves an opportunity to earn an academic degree and chart a new course for their future and their family.

CORPORATE PARTNERSHIPS

Since its launch, UoPeople has built partnerships that are paving the way to a faster, and more direct, route to success, through such partnerships as those with Yale's ISP for research and New York University's agreement to accept high-performing students.[15] These partnerships have given us credibility within the academic world. New York University has proved to be an especially strong supporter as it shares a mission of reaching individuals of varied backgrounds from around the world. As NYU's president John Sexton says, "We admire that UoPeople is seeking to bring higher education to so many of the world's disadvantaged, and we anticipate a productive collaboration between them and NYU in identifying exceptionally bright and ambitious young people worldwide who could join our Abu Dhabi campus."[16] Furthermore, many of UoPeople's distinguished academic leadership volunteers hail from NYU.

In conjunction with its university partnerships, UoPeople has developed networking partnerships with social organizations that share its goals, including the United Nations Academic Impact Global Initiative, Ashoka, the Clinton Global Initiative, and Partners for a New Beginning (PNB). It also partners with foundations such as the William and Flora Hewlett Foundation[17] to further the cause of developing OER. And it works with corporations motivated by social responsibility to create scholarship funds such as those of Hewlett-Packard, Intel, and Western Union; all directly help to democratize higher education. The box provides some details on the Hewlett-Packard partnership.

Hewlett-Packard's Social Responsibility Programs for UoPeople

HP has a long tradition of supporting innovation in education, and has invested considerable financial, employee, and computer resources to further UoPeople's educational initiative.

Scholarships. Hewlett-Packard and UoPeople joined forces in 2012 at the DLD women's conference. Worldwide, only 20% of UoPeople's students are female. In sub-Saharan Africa, only 10% are—and it is home to many of our students. UoPeople is eager to improve this ratio and equalize the gender representation of its student body. At the DLD conference, I announced our challenge: attracting more women students. Gabi Zedlmayer, HP's Vice President of Sustainability and Social Innovation, quickly followed this announcement with the news that Hewlett-Packard would be donating $200,000 for a HP Women Scholarship Fund to support 100 women students working towards associate degrees. As she explains, "HP has a longstanding commitment to global citizenship, education, and gender equality. We are supporting UoPeople in their most critical mission to change the lives of many women through education and technology. This decision supports our goal to transform teaching and learning through innovation and technology and to help the women around the world to advance professionally."[18]

Mentorship. Hewlett-Packard did not stop there, but increased its involvement, creating the HP Mentorship Program. Students who obtain an HP scholarship and perform well academically are eligible to become HP scholars, by participating in the HP Mentorship Program, which pairs an HP employee with a UoPeople student for one-on-one mentoring throughout the duration of their studies. As students are located across the globe, meetings are conducted via Skype, Google+, and other video-conferencing methods; those without broadband use SMS chat. This program gives students a unique and firsthand experience: in addition to gaining access to education, they get to know a successful professional. This helps prepare them for the corporate world and may even help them find a job.

Computers. Hewlett-Packard also donated computers to UoPeople and its ally in Haiti, the Haitian Connection Network (HCN), to grow its Student Computer Center. Few of UoPeople's students in Haiti have personal computers. Some travel, sometimes for miles, to reach the center.

Accreditation efforts. Finally, Hewlett-Packard joined with the Bill and Melinda Gates Foundation, the Ewing and Marion Kauffman Foundation, the William and Flora Hewlett Foundation, the Carnegie Corporation of New York, and others, to support UoPeople's accreditation efforts with a $200,000 donation to be allocated specifically for that purpose.

In addition, Hewlett-Packard works with UoPeople on the shared goal of helping students gain knowledge they can apply in the labor market. While UoPeople is clearly not a job placement organization, it works very hard to prepare students to find jobs and perform well professionally. Hewlett-Packard's internships and mentorships are great tools for this purpose. BAV Consulting supports another internship for UoPeople's business students. Most of our students want to improve their odds of finding a better job, to improve their standard of living and have a chance at a better future. These are the reasons why we teach business administration and computer science: the degree programs in most demand worldwide and most likely to lead to employment. The internship and mentorship opportunities with Hewlett-Packard and BAV further improve students' skill sets.

GLOBAL UNDERSTANDING THROUGH A UNIQUE CLASS FORMAT

UoPeople is unique in another important way. It is driven not only to increase opportunities for workforce involvement, but also to increase global understanding. In fact, the UoPeople classroom experience itself can be described as one large global dialogue with much intriguing conversation and feedback. Because the

Don't Forsake Haiti

By Joe Jean

I would like to say the Haitian earthquake three years ago this month ruined everything. But, sadly, there wasn't much to ruin.

When the earthquake hit my country, life was already very hard for me, just like it was—and is—for many Haitians. I dreamed about going to college, but knew that my family was too poor to afford it. I wanted more, but had no idea how to achieve it.

And then the earthquake came and pushed me even farther away from my dream. Twenty-eight of our 32 universities were wiped out, and the remaining four were hit hard.

But I didn't give up. Now, on the anniversary of the earthquake that hit at the heart of my homeland, I want to tell the world not to give up on Haiti either.

Memories of the earthquake are still so vivid to me. I lost one cousin who was studying nursing in Port-au-Prince. The earthquake has made living in Haiti harder than before since it has negatively impacted all aspects of our lives. But I know that without higher education, all hope is lost.

My quest for a higher education began in 2006, when I passed the TOEFL English language test, which would allow me to apply to a U.S college. But in 2007, things started falling apart at home.

My father was hit by elephantiasis and couldn't work. My mother could not afford to pay for any quality local university for me because she still had to support my two little brothers and my little sister's education. It was always my intention to help support their education once I finished college, but suddenly that wasn't even a possibility.

I didn't give up though, and managed to get a scholarship to study computer science at a private college in Port-au-Prince, about four hours away from my hometown of Cap-Haitien. But the classes were not very challenging, and I started to question whether they were even worth attending. Unfortunately, the earthquake made that decision for me when the campus was destroyed.

I returned to Cap-Haitien, feeling even farther away from my dream of a college education than before I left. This was just another setback, I told myself, and I shifted my focus to looking for a virtual educational opportunity, one that would not be ruined by lack of funds or natural disasters. And then, I found University of the People, a tuition-free online university. It was one of those moments in life when everything suddenly changes.

I began UoPeople as soon as possible. I had no Internet access at home, so I would go to a local cafe where I paid about 76 cents an hour in order to study. I would bring a used laptop given to me by an old high school classmate who moved to Canada. To save money I would try to download as much material as

possible at the cafe and then do the work offline at home. This worked pretty well, except when the electricity went out, which happened frequently.

When UoPeople opened a computer center with a local NGO, it made my life much easier. After a few months I was showing up early to help other students figure things out. I volunteered at the center full time, with no pay for months. Eventually, I was offered a very small stipend but I could not live on it, so I found more work and balanced my jobs, my studies, and my family responsibilities.

While I was studying, UoPeople announced its partnership with New York University to enable the best students to apply to NYU Abu Dhabi. I applied immediately, honestly not even able to imagine a world away from Haiti, but anxious to try for this amazing opportunity. I was invited to the Candidate Weekend in Abu Dhabi. However, to fly to Abu Dhabi, I had to travel through the United States and needed a transit visa. I couldn't get the U.S. embassy to expedite my interview. After all attempts failed, I was heartbroken.

Then a miracle happened. I was granted the transit visa, and made it on time to the Candidates Weekend. As one of 15,000 vying for 150 spots at Abu Dhabi, I knew the odds were completely stacked against me. But I beat the odds. This September, I started my studies, on a full scholarship, at NYU Abu Dhabi.

I am telling you my story because I need you to know that I am not the only one like me. We Haitians have endured and continue to endure enormous daily travails. Many things go wrong in our country, and this is what the world tends to see again and again.

But many things go right too, and it is because of Haitians like me who won't give up until they beat the odds.

online classes are small, with about 20 to 30 students studying with others from as many as 30 other countries, UoPeople increases everyone's access to diversity, allowing students to develop international friendships and global perspectives. A bachelor's degree requires 40 courses, ensuring that students have 40 experiences of meeting 20 to 30 new students from that many countries—and sometimes countries that are considered to be political enemies. Picture what happens when students from Israel and Palestine study together, or students from India and Pakistan, or students from Greece and Turkey. They get to know each other, and learn to understand and respect each other. Instead of being enemies outside the class they become friends. UoPeople believes that is our contribution to world peace.

UoPeople's classes use peer-to-peer learning with instructor oversight. After students are accepted they are either referred to UoPeople's Accelerated English Program if their English proficiency is not strong enough, or they start taking courses towards their degree. Each course lasts nine weeks; academic weeks start on Thursday and end on Wednesday. In the online classroom, they first find the profiles of their classmates. This format feels similar to Facebook: each student can decide how to set up their profile and how much information to share. The first step, then, is for students to get to know their classmates in the Course Forum. They then find the study guide for the week, the reading assignments, the homework assignments, and the discussion questions.

The discussion questions are critical as they allow students to interact intimately with each other. This is where the peer-to-peer learning and exchange take place. The instructor begins the week by posing a question to the class. After they read everything, the students discuss the material, engaging in global conversations on the subject at hand. For example, a student in China reads the week's lesson material, considers the discussion question, and posts a response. Then a student from Indonesia does the same, commenting on what the Chinese student said. Four hours later, a student from Saudi Arabia, having done the reading, comments on what one of the first two said. At this point, the Chinese student will likely go back into the online classroom to see how others have responded to his comment. The discussions evolve like this all week long: each student, every week, contributes to the class discussion and comments on other students' points. Every discussion forum, of course, is moderated by the instructor, who corrects and responds to questions as necessary. This forum also allows the instructor to identify any gaps in students' understanding of the materials and required learning for the week.

Additionally, the students peer-review each other following the instructor's rubric. For example, after each student posts a response, it is peer graded by three other students. Again, of course, the instructor monitors the process and can override the grade if necessary. Students take the responsibility of peer assessing seriously, and are very careful about how they review their classmates as they do not want to be reviewed unfairly. This peer-to-peer learning, combined with individual, and instructor-assisted learning, creates a unique and exhilarating experience.

By the end of the week, students take a quiz to ensure that they have mastered the materials and send in their homework by email; it is then graded by their peers, under the supervision of the instructor. They keep going this way, between assignments and discussion boards and quizzes, to the end of the course. Then they take a final exam, which is often proctored, and receive a grade.

These are virtual classrooms. UoPeople decided to adopt asynchronous study to accommodate students in every time zone. Further, it limits the mandatory use of audio and video. Many students in developing countries study using dial-up. Materials that require broadband would exclude them—and thus contradict UoPeople's mission. In addition, some UoPeople students study using portable USB drives: they go to an Internet café to download the class material, then travel home to work with it and return to the café to upload the material they worked on. UoPeople has even initiated a virtual desktop to accommodate computer science students who need to work on programming languages, for example, but cannot download a program onto an Internet cafe computer or other computer they don't own. UoPeople specifically uses what is actually available globally, and not necessarily what is the most advanced or cutting-edge technology. Interestingly, even students in developed countries using broadband have reported that this structure of asynchronous study, combined with simple technology and available solutions, is quite helpful, as it allows them to study comfortably by reading anywhere: on the bus or train, during breaks from work, etc.

Instructors play an active role in the classroom; they are there not only to support students but also to act as mentors when necessary. Students can contact their instructors via email, or through the course message board, or they can post a question in the class forum. As previously mentioned, each week the instructor posts a discussion question and reminds students of the expectations for the week through the learning study guide. Our instructors are very responsive, as they should be, to all student inquiries and go a step further by reaching out to individual students if they identify a gap in learning. For consistency, each week's lesson has the same format and at the end of the term—after final exams—the instructor computes the student's final grades.

Thus, we have accomplished what we set out to do. We have shown that a university can lower the cost of a high-quality education by combining Open Educational Resources, open source technology, peer-to-peer learning, and the assistance of volunteers. Not only have we dramatically decreased the cost of education, but we are also providing quality education: an education that graduates can actually use and show to employers. And we have done all this by being technology driven, yet sensitive to the limitations of technological infrastructure worldwide.

Accessible basic technology plays a crucial role in UoPeople's mission; it is one of the methods that enables us to provide tuition-free, quality academic education to students in remote areas.

The exceptionally low cost per student is based on our unique operational model, which consists of five key elements.

No campus. All teaching is online, eliminating real estate costs.

Volunteers. We use volunteers to develop courses, and lead both classes and the whole institution. Thus we can offer excellent academic quality while saving a significant amount of money compared to similar institutions.

Marketing via social media. With over 1.25 million supporters on Facebook, we rely mainly on our supporter community to spread the word.

Technology. We are developing a unique technology platform that provides automated support for students during their entire time with us, from admission to graduation. This allows the University to operate efficiently, with a very lean administrative staff.

Global workforce. As a global organization, we can operate from countries with relatively low labor costs.

UoPeople combines accessible and basic technology with asynchronous study and limited use of audio or video to ensure that students anywhere in the world can study with us, regardless of the technology available to them. In doing so, we are not only opening access to higher education for some, but actually equalizing educational opportunity for everyone. Now, an individual in Haiti with no home electricity or toilet facilities, who walks for half an hour to get to a student computer center, and an individual from a rural area in the United States, learning on a laptop at home or on public transportation, can both access materials equally and participate in the same discussion. Ensuring that anyone in the world can participate is what ensures a truly lively and moving discussion. Combining technology, by automating the administrative processes from admission to graduation using text-based modified OER materials, flattens access in a way that reaches nearly everyone. This does come at a price: UoPeople cannot include the fanciest of technologies or all that the Internet offers, as this would limit access. Another limitation is that all material is in English—but automation technology is actually breaking down this barrier, as translation services are infused and adopted within educational resources.

A friend once said, "When you give, you get back a significant amount more than what you gave." Indeed, what UoPeople is giving is the respect that all human beings deserve in order to learn, improve their skills, and contribute to their communities. In return, UoPeople gets the knowledge that life by life, community by community, the world is improving. The lives we are impacting are those of deserving individuals who are motivated, but merely deprived of the opportunity. One such student, Joe Jean, shares the story of his progress from the rubble of post-earthquake Haiti, to UoPeople, and now to one of the world's most selective universities: NYU Abu Dhabi.

At the core of our daily educational delivery is the knowledge that what we are doing is not only helping individuals of the world change their lives. We are also serving as a model for governments and universities. They can examine, and then adopt, all or part of our model to bring down the cost of education throughout the world. Imagine what can happen when UoPeople scales further. Imagine when governments and universities around the world follow suit and hundreds of colleges on the UoPeople model are educating not just 5,000, or 50,000, or 500,000 students, but millions of them.

The only way to show others that we can achieve a changed and widely educated world is by doing it. So we are.

1. For a list of all scholarships available to UoPeople students, see http://www.uopeople.org/groups/support_us2/support_students The Micro-Scholarship portal is at http://www.uopeople.org/groups/students
2. ISCED levels 5 & 6 UNESCO Institute of Statistics figures & British Council and IDP Australia projections cited in T*he World Conference on Higher Education*, 2009: p.6, available at http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/ED/pdf/RANKINGS/Stamenka-JohnDaniel.pdf
3. European Commission, "Efficiency and Effectiveness of Public Expenditure on Tertiary Education in the EU," *European Economy Occasional Paper* no. 70, Brussels: European Commission, October 2010. http://ec.europa.eu/economy_finance/publications/occasional_paper/2010/op70_en.htm
4. Lance Lochner, "Non-production Benefits of Education: Crime, Health, and Good Citizenship," NBER Working Paper 01/2011, Cambridge, MA: National Bureau of Economic Research, 2011.
5. Mikael Lindahl and Alan B. Krueger, 2001. "Education for Growth: Why and for Whom?" *Journal of Economic Literature* 39, no. 4 (2001): 1101-1136; European Commission, "Efficiency and Effectiveness."
6. The rising costs of higher education are noted, for example, in College Board Advocacy and Policy Center, Trends in College Pricing 2012 and Trends in Student Aid 2012; these show that the average 4-year degree in the United States costs approximately $8,000 to $40,000; see advocacy.collegeboard.org. The website of the College Affordability and Transparency Center, of the U.S. Department of Education, at http://collegecost.ed.gov/catc/Default.aspx, shows that the average tuition at a four-year public university rose 15% between 2008 and 2010.
7. Michael McPherson and Morton Schapiro, *College Access: Opportunity or Privilege?* New York: College Board, 2006; Derek Thompson, "How America's Top Colleges Reflect (and Massively Distort) the Country's Racial Evolution," *The Atlantic*, January 23, 2013; Lumina Foundation, *A Stronger Nation through Higher Education*. Indianapolis: Lumina Foundation, 2012, available at http://www.luminafoundation.org/newsroom/newsletter/archives/2012-05.html
8. Lumina Foundation, *A Stronger Nation.*
9. As the World Bank notes, "the education sector can become an effective fiscal instrument for alleviating poverty and redistributing income." World Bank, "The Education System in Malawi" World Bank Working Paper 182; Washington, DC: World Bank 2010: 102. See, for example, *The Pew Charitable Trust, How Much Protection Does a College Degree Provide: The Impact of the Recession on Recent College Graduates*, Washington, DC: Pew Trust, 2013, available at http://www.pewstates.org/uploadedFiles/PCS_Assets/2013/Pew_college_grads_recession_report.pdf; Anthony Carnevale, Tamara Jayasundera, and Ban Cheah, *The College Advantage: Weathering the Economic Storm*, Washington, DC: Georgetown University Center on Education and the Workforce, August 2012; and Katie Zaback, Andy Carlson, and Matt Crellin, *The Economic Benefits of Postsecondary Degrees: A State and National level Analysis*, Boulder, CO: State Higher Education Executive Officers Association, 2012, available at http://www.sheeo.org/resources/publications/economic-benefit-postsecondary-degrees
10. Committee on Economic, Social and Cultural Rights, General Comment 13: The Right to Education, E/C.12/1999/10 (8 December, 1999), paragraph 1. For education's impact on society, see European Commission, "Efficiency and Effectiveness"; Lochner, "Non-production Benefits of Education," and Krueger and Lindahl, "Education for Growth."
11. I. Elaine Allen and Jeff Seaman, *Changing Course: Ten Years of Tracking Online Education in the United States*. Babson Park, MA: Babson Survey Research Group and Quahog Research Group, 2013.
12. Thomas Friedman, "Revolution Hits the Universities," *The New York Times*, January 26, 2013.
13. Jo Morrison, "MOOCS: Daphne Koller of Coursera Shares Insights," Digital Present (blog), January 2, 2013.
14. Chris Parr, "MOOC completion rates 'below 7%,'" *Times Higher Education*, May 9, 2013, available at http://www.timeshighereducation.co.uk/news/mooc-completion-rates-below-7/2003710.article

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16 See http://www.nyu.edu/about/news-publications/news/2011/06/09/nyu-partners-with-uopeople.html
17. For more information on partnerships, see http://www.uopeople.org/groups/partners
18. See http://www.uopeople.org/180845.

Fiona Macaulay

Toward a World of Opportunity

Innovations Case Narrative:
Making Cents International

One evening in 1997, I sat in a shack in Khayelitsha Township outside of Cape Town, South Africa, and looked around at the ten adults who were about to be my students in a microenterprise course. Some were unemployed, others were just starting businesses, most were illiterate—and all were struggling mightily. The mix of eagerness and uncertainty I felt was reflected back to me in the eyes of my students.

Putting my feelings aside, I dove into running the business simulation, describing a virtual marketplace in which the participants operate fictitious businesses. Things started a bit slowly, but within half an hour, we were all engaged and connected—and excited. These women and men grasped and increasingly mastered the interplay of costing and pricing, analyzing the risks of selling on credit, and the benefits of developing a negotiation strategy. We were all involved in this virtual marketplace. Participants bartered and boasted as they finalized sales and tallied their profits.

The debrief was momentous for me. After only two hours of interactive training, the participants confidently demonstrated a deep understanding of microbusiness management concepts. Why develop a negotiation strategy? To get a better price! How do we do this? Understand your maximum and minimum price, consider the other person's point of view, and keep the relationship positive so you can do business again tomorrow. Though they still had plenty to learn, the trainees were ready to return home, draw on their experiences from the simulation, and apply their new skills to making money the next morning, saving more wisely and investing more strategically.

On my drive home, still feeling exuberant, I reflected on how crucial an experiential learning approach is for teaching practical microenterprise and entrepre-

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neurial skills. I realized this method had the potential to change lives: it allowed the participants to build on what they knew, based on the premise that, given the right tools and knowledge, people can learn more than they—or others—think they can. The course capitalized on this, allowing participants to experiment and take the risks involved in running a business while staying within the safe confines of a classroom. They were also re-enforcing or developing attitudes, learning skills, and building confidence—all key to achieving personal and professional goals.

The next morning I woke up feeling despondent. It struck me that I had taught ten people the day before, but nearly half of the population in South Africa was unemployed. Moreover, nearly 75% of the population was under 35, and I knew that many of the world's 1.4 billion young people between the ages of 13 and 28 would lead lives like those unemployed adults in Khayelitsha, because their school systems are failing and they lack opportunities in and outside of home to learn how to earn, save, and invest in the education that would lead to jobs.[1]

But, I thought, what if we could equip young people on a massive scale with entrepreneurial life skills like problem solving and planning, the confidence to do things in new ways, and business management skills—and couple it with knowledge about how to manage their money and save it in a safe place. Could that break the cycle of chronic unemployment and limited economic choices? The seed was planted. I knew I was going to focus on increasing economic opportunities for others, especially children and teenagers. I recognized the need to reach young people as early as possible with these crucial skills, using a method that made learning fun, yet effective. I also saw how crucial it was to support the teachers and trainers on the front lines of this new kind of experiential education. This faith in experiential learning, joined by an understanding of the crucial need for local capacity building and practical responses to complex problems, underscored my approach to serving youth, and more recently to developing the field of youth economic opportunity (YEO).

Two years later, in 1999, at age 26, I was ready to return to my family in North America. I had seen how an experiential learning model effectively delivered entrepreneurship training to low-income people in South Africa, and I was sure the approach was applicable in many other contexts. And I couldn't find any organization doing anything similar using an effective and affordable model. So I started one.

I looked for an approachable name for my organization that wouldn't become a meaningless acronym. I wanted the name to speak to the most important clients—low-income youth and adults—and I wanted it to tell our collaborators what we are about: helping people make, save, and invest their money, and our belief that these are "must have" capacities. To me, it just made sense. And the name of the organization was born: "Making Cents"!

Inspired, I was ready to roll my plan out to the world. But how? Which entity could I partner with? The United Nations looked like my best option: it works globally and appears to have a shared mandate, so I assumed people there would be interested. I moved to New York City, in part to be near the UN headquarters, rented a small apartment, and called a toll-free number to register my new non-profit. They told me the process would take 10 months.[2] What? I want to start my work tomorrow! So, the next day, I founded Making Cents International as a for-profit social enterprise.

STARTING MAKING CENTS

It turns out that the UN is an impenetrable bunker for those who are inexperienced, naïve, and unwise about the ways of the international development industry. So, turning to other avenues, I presented my methodology to countless international NGOs, funders (corporate and private foundations, international overseas development agencies such as USAID), and international development consulting firms. I also introduced our curriculum to U.S. schools and programs serving inner-city kids and to microenterprise organizations that serve adults.

In its first year, Making Cents was hired to equip organizations to offer basic microenterprise training to low-income adult micro-entrepreneurs and teenage students in vocational training programs in Guinea, Ghana, Tanzania, and Haiti. People in Bolivia picked up our methodology and tools and used them to complement a training program for women learning technical skills to make handicrafts for export to North America. And in New York City, an inspiring teacher, working with high school dropouts who could not learn through the traditional chalk-and-talk method, developed an employability course based on our practical learning methods and curriculum. In Colorado, our tools were used to enhance a training and lending program for young people. In Mexico, we developed a partnership with a leading foundation whose founder and I shared a passion to bring entrepreneurial content to all low-income children and teenagers, both inside and outside of the school system, so we can seed the next generation with crucial business and entrepreneurial skills.

The organizations that hired Making Cents liked our commitment to building local capacity and encouraging local ownership within development programming. Both our training materials and our training-of-trainers (TOT) methods were effective, fun, and invigorating for participants as they learned new skills. Making Cents received enthusiastic reviews. For the trainers, the TOT developed facilitation skills, trained them in planning and delivery, and taught them to adapt the course to the needs of clients: out-of-school teenagers, farmers, microfinance borrowers. The trainers said they were learning skills they could apply in their regular jobs, making them more valuable employees. To supplement their income, many of the trainers already had small income-generating activities in addition to their salaried jobs and they were excited about the additional business skills they picked up. Together, the tools and the know-how equipped front-line staff of vocational training institutions, women's development NGOs, and microfinance institutions to deliver basic microenterprise skills to low-income, poorly-educated people aged 15 and over. The training tool was high quality, durable, and affordable and the trainer skills program was a one-time cost; this let our clients lower their per-person costs significantly while they increased the quality of the product they were delivering.

GROWING PAINS

Meanwhile, as a micro-entrepreneur myself—and de facto head of technical assistance, marketing, operations, and finance—operating my business out of my apartment with the sporadic help of family, I was facing some business management challenges.

The first was the question of how to scale my work and position Making Cents in the international development sector. At the time, Grameen Bank in Bangladesh, a pioneer in microfinance, was 20 years old and the idea of supporting micro-entrepreneurs through access to credit for the poor had good traction. At the first Microcredit Summit, in 1997, First Lady Hillary Clinton said that microcredit was a paradigm breakthrough that had gotten people out of the "conventional box of thinking about the poor. " In the United States, many international NGOs and private voluntary organizations working in international economic development adhered to the policy of reaching the largest number of low-income people at the lowest cost. They saw additional services as cost-prohibitive or unnecessary. That prevailing mindset didn't match with what I was seeing and what micro-entrepreneurs told me they needed.

Also, as an entrepreneur learning to keep my own books, identify the best sources of financing for my business, and make decisions about where to invest my time and money, I had first-hand experience of the challenges of business ownership. I was living the reality of what I was teaching: starting and growing a business required business and financial skills, access to markets, mentoring, and a network of other business owners facing similar challenges.

In meetings with youth-serving organizations, people sometimes questioned me about the ethics of teaching teenagers and children about money: how to earn it and think entrepreneurially. Was it appropriate to teach microenterprise skills to people under 18? Few seemed to understand the reality: most school-aged youth around the globe are in fact both "learning and earning."

I also struggled to understand my place in the market. In this niche, I sought to shape the dialogue about the need to support micro-entrepreneurs, and the form that support should take. For children and teenagers, I advocated using entrepreneurship and experiential learning to make school-based programs more relevant and to bring essential knowledge, skills, and attitude development to low-income communities so that these young people would be employable, or could start and grow a business, whether by choice or necessity.

A second issue was being a for-profit organization. In the offices of bilateral agencies and the oak-paneled meeting rooms of international not-for-profit organizations, people viewed this type of work as pertaining exclusively to the non-profit domain. I was offering an excellent product—my workshops—at a competitive price, and I was committed. So why were they concerned about my status with the

Senegalese women learn basic record-keeping

Internal Revenue Service? No one was getting rich here. In fact, I considered bringing my balance sheet to meetings, but decided that showing I was not making money would also reflect poorly on me. When people asked if I was a "for-profit," I began to answer "not yet!" Clearly we needed to scale up Making Cents so that we could hire more staff and find more clients who valued our approach.

Making Cents' cash flow—and my motivation—were sustained by some meaningful opportunities that allowed us to innovate. The Barbados Ministry of Education hired us to mainstream entrepreneurship content into the school system, as employers increasingly struggled to find workers with the appropriate work ethic, attitudes, and basic skills to take advantage of training. This fit with a new government policy and a new approach to workplace training: foster an entrepreneurial climate and empower young people to start businesses that will help their communities and their nation develop. We developed a long-term contract with the ministry. We would provide curricula and develop teacher know-how to improve students' critical thinking and problem-solving skills and increase their business acumen—and would transfer that capacity to the government employees managing the program.

FROM START-UP TO SCALE-UP

The year 2001 brought a breakthrough for Making Cents, as a Senegalese delegation of microfinance providers came to Washington, D.C. They had hands-on experience with our tools and were interested in taking the model to Senegal for adults and young people. I developed close professional and personal relationships with committed Senegalese experts in community economic growth. We learned from each other and adapted our curriculum and delivered trainings to 850 people who in turned trained thousands. This was applied research on steroids. Each night, week after week, we would tweak our plans for the next day and after each course we would work through the weekend to improve our methods for the next week. We were driven to make the training relevant for every individual—client, farmer, borrower, student—and to deliver it in an appropriate way. A small USAID subcontract became a large multi-year one.

In Senegal, over a three-year period, I watched the local organizations absorb the microenterprise and entrepreneurship training tools and acumen. Vocational training institutions, working with people aged 16 to 25, added business skills to their technical skills training. Schools reported that students saw these courses as more relevant; the entrepreneurial content showed them how—and why—to apply math skills and to write clearly. The Senegalese National Federation of Women's Groups, the Federation Nationale or FNGPF, working with women 18 and older, built a national training program around these tools. Those women who had shown themselves to be the most talented trainers, with the strongest grasp of business concepts, were designated as in-house facilitators. As a benefit of being two steps ahead of the other women, they could provide relevant training and mentoring to their peers; the roughly $8 US per training sessions that they charged their peers made the business worthwhile to them and affordable for the other women. The FNGPF members reported that they could manage their resources better and strike a better balance between saving, investing in their business, and personal spending.

Through the work in Senegal and with other clients, we honed two characteristics of our approach: experiential learning and capacity building for individuals, groups, and organizations using a model of knowledge transfer and accompaniment. We looked more and more closely at how we could prepare trainers to train others using a cascade model, at how groups develop strategies, and how to plan projects in a demand-driven way. Clients' solutions are often complex and unfold over a period of time; they cannot learn every piece of information or skill they need in one workshop. So, beyond one-time training, Making Cents began to accompany the client and to provide training, mentoring, coaching, and advice at appropriate points in the project cycle.

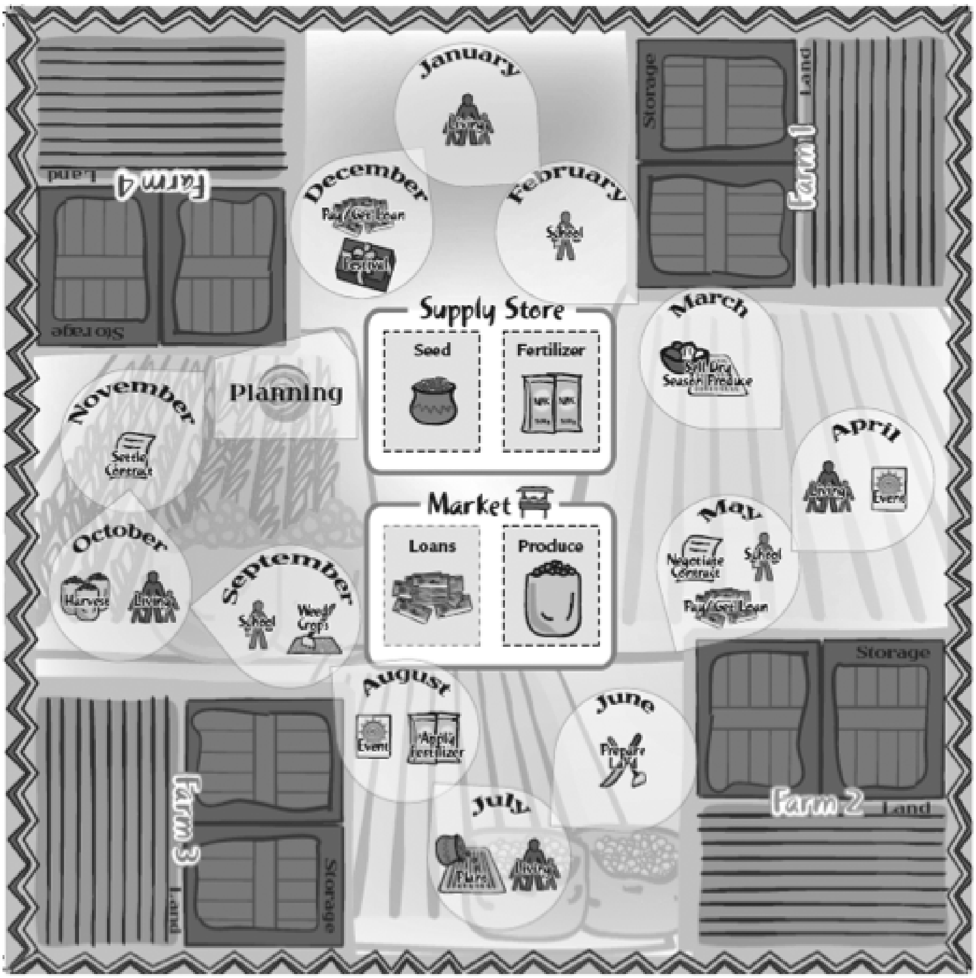
In the early days of Making Cents, I likened our training packages to a four-wheel drive vehicle. It worked great in the roughest conditions: overcrowded classrooms, poorly trained instructors, and a lack of information. But put it on a paved road with good infrastructure and it could really take off! I was both right and

Making Cents' *MicroEnterprise Fundamentals* curriculum is adapted to incorporate local value chains

wrong. Steeped in experiential learning, the training materials could work very well in many settings. But the trainer, to succeed, also needed support.

Many of the community-based trainers—who were often the most willing and affordable, and best positioned to deliver training and coaching to other low-income people—were only a step or two ahead of the people they were training. I increasingly understood that we needed more strategies to support them after they left our training program. We also needed to involve "the boss" in the training so he or she would feel ownership over the new approach. Without this, we found that many motivated trainers or loan officers returned to their organization only to hear, "Just tell them what they need to know in an hour; they don't need to take time to talk about their businesses." And teachers, who were looked to as business coaches, often lacked entrepreneurial attitudes and understanding of basic business concepts.

In Senegal, to address these deficits, we tried an experiment. On the first day of a TOT, we ran the teachers through an accelerated business start-up course that culminated in selecting a simple food-based manufacturing business. They had five days to develop and implement a basic business plan for an enterprise they could start, run, and close in five days, with a maximum investment of $10 US. They came up with jus du bissap (cold hibiscus flower tea, the national drink of



A piece from Making Cents' Agricultural Enterprise curriculum, used to increase farmer's income.

Senegal), confiture (jam), and beignets (small donuts). We told them they had to focus on their training courses when we were in session. But outside of that—during breaks, lunch, and before or after the training—they were free to, and expected to, operate their businesses and generate a profit. The trainers didn't think we were serious. The second day we urged them on. On the third day it all took off: the training room and hotel lobby became a buzzing marketplace, and we had to start issuing a small fine to any teacher "conducting business" while we were delivering the training content. When I arrived at the hotel breakfast buffet on the fifth and final day of the training, I found it contained a silver urn full of jus du bissap. Clearly my students had found a lucrative market! This focus on equipping the implementers with the necessary information and motivation would continue to resurface and drive the direction of Making Cents.

FROM SCALE-UP TO EXPANSION

For our first 5 years, Making Cents added about one new employee per year. These people brought new expertise and allowed the company to expand from our exclusive focus on training to offer a broader suite of services, but still rooted in our core emphasis on local capacity building, operating as equals, hands-on learning, and concrete outcomes. In Jordan, we supported the development of a local not-for-profit to help women who wanted to grow their businesses, formalize them, develop a business network, and spread the idea of women owning businesses through exposure in the mainstream media.

In Armenia we offered similar support to business owners; we developed a business registration roadmap to help new business owners navigate the 19 steps required to register a business. We also helped them navigate through the corruption around them because they could now point to an official document that explained the process including where fees *should not* be charged, and advocate to the government to simplify the process.

In Nigeria, we used our approach to teach small-scale farmers about key business concepts: predicting and preparing for risks, developing strategies for periods of high and low cash availability, and understanding the value chain to get more profit out of their farming activities. Making Cents worked through the project cycle with them, beginning with market research and then designing programs, building capacity, and developing monitoring and evaluation systems.

By 2004, we had provided technical assistance in 39 countries in the Middle East, North Africa, Africa, Latin America and the Caribbean, and North America. We had adapted 25 curricula into a total of 25 languages including Arabic, French, Spanish, Russian, and six indigenous African languages. And we had strengthened the capacity of more than 2,000 people and 200 organizations.

IDENTIFYING GAPS

The large, long-term economic growth programs we were working on all focused on adults. I was pleased with the results of our work with low-income people but we were still far from my dream of economically empowering young people on a large scale.

Along with other Making Cents staff and our local partners, I started asking how we could better equip young people with the ecosystem of support that was being offered to adults. Informally, we began to link small, disparate groups working on youth economic development. The Ministry of Education in the Mariana Islands wanted to learn from other governments experimenting with bringing entrepreneurship into the classroom, so we introduced them to our colleagues in Barbados. A group in Colorado wanted to know who else had experience bringing banks into schools, so we introduced them to a seasoned children's bank in Sri Lanka. The more we linked organizations, the more I discovered a growing demand for information—and a very small supply of it.

In 2004, you could attend a learning event on adult microenterprise every week. But if you were looking for conferences on international youth economic development, you'd find a barren landscape: no conferences, no research agendas, no donor coordination, no working groups. Not even informal gatherings. The few learning events for stakeholders tended to be narrow in scope (e.g. conferences for researchers in youth entrepreneurship), internal to organizations, or geared to serve specific program purposes, rather than the entire community of youth economic stakeholders. There was little coordination or collaboration, and few tried to build others' capacity through hands-on sharing of lessons learned, promising practices, or field-tested tools.

How was the international development community going to learn how to increase economic opportunity for young people? How could I strengthen and expand Making Cents' technical services? Without venues and vehicles to manage knowledge on this topic, various organizations kept making the same mistakes as others had before them: operating on a small scale, wasting resources, and failing to create partnerships that could enable them to efficiently achieve their program and policy objectives. I was also surprised that no one seemed to know about youth demographics. Where I did find information, it often had an alarming tone about the impending "youth problem." This was frustrating! Instead of looking at the scale of the problem, could we look at the scale of the opportunity?

I started talking to my Making Cents colleagues about organizing a global forum for people focused on youth and microenterprise, one that would bring together a range of diverse actors whose work affected the opportunities young people had or lacked. But I was daunted by the size of the vision we needed. Wouldn't USAID or the World Bank be a more appropriate organization to convene international actors on a large scale, rather than Making Cents International, which was then a six-person operation?

Two years later, in October 2006, I was given the push I needed. I won a competition and was accepted into a program designed to take growth-oriented U.S. women business owners to the next level, by helping them focus on their vision and how to achieve it. I felt on top of the world, until I had a crucial conversation with the head business coach.

> *Coach:* What is your vision, and what are you doing to achieve it?
>
> *Me:* My vision is for every young person the in world to learn entrepreneurial skills so they have a greater chance to succeed personally and professionally and achieve their full potential. I want to connect every organization in the world that cares about this topic together to share experiences so we can reach more young people faster and better.
>
> *Coach:* What are you doing to achieve it?
>
> *Me:* Um, nothing.

As those words left my mouth, I felt deeply embarrassed and felt I had let myself down; I was jolted into action. The next day, I returned to my office to create the conference I had always wanted to attend: a global learning forum focused on increasing youth economic opportunities. Suddenly I was following those famous words of Mahatma Gandhi: "Be the change you wish to see in the world."

BE THE CHANGE

I hired staff to coordinate the conference and drew up an advisory committee. Whitney Harrelson, an advisory committee member, became the manager of our conference, and together we conducted a global consultation to identify the priority issues. We put out a call for session proposals, invited leading stakeholders to be plenary speakers, announced the conference program, and built partnerships with funders to finance the learning agenda.

Just as our technical approach focused on facilitating knowledge transfer between individuals, our conference would facilitate knowledge transfer between organizations, panels and break-out sessions would provide hands-on and concrete interactive learning opportunities. We coached speakers not to simply describe what they did, but to dissect their programs and explain why something worked or what they learned when something did not go as planned. We asked everyone participating in the conference to share their expertise and play the role of capacity builder and mentor to their peers. We hoped that creating a neutral playing field would help participants move past "success stories," to explore challenges and opportunities to make our work more effective.

The Making Cents team worked hard to ensure we had representation from a cross-section of stakeholders. We invited implementers, researchers, teachers, funders, consultants, youth, and people from private-sector companies, financial institutions, schools, NGOs, and consulting firms. These were not just voices from economic development, but also from areas that influence, and are impacted by, youth as workers, entrepreneurs, savers, and borrowers—including representatives from the worlds of health and education, democracy and governance, and conflict prevention. We prioritized meaningful youth participation and funded scholarships so young people could attend and influence these discussions that affected them.

We also thought about evaluation. Our technical services people knew all too well about the scarcity of resources and strategies to measure the effectiveness of our work. Of course we could count the number of trainers and end beneficiaries we reached, and we did qualitative follow up, but that told us little about what really mattered. How many of the ultimate recipients of our training started their own enterprises? How many of those enterprises were still around three years later? Were our trainees succeeding in raising their incomes? If Making Cents was having trouble answering these questions, we reasoned, our colleagues must be too. So monitoring and evaluation (M&E) became a priority area for discussion at the conference.

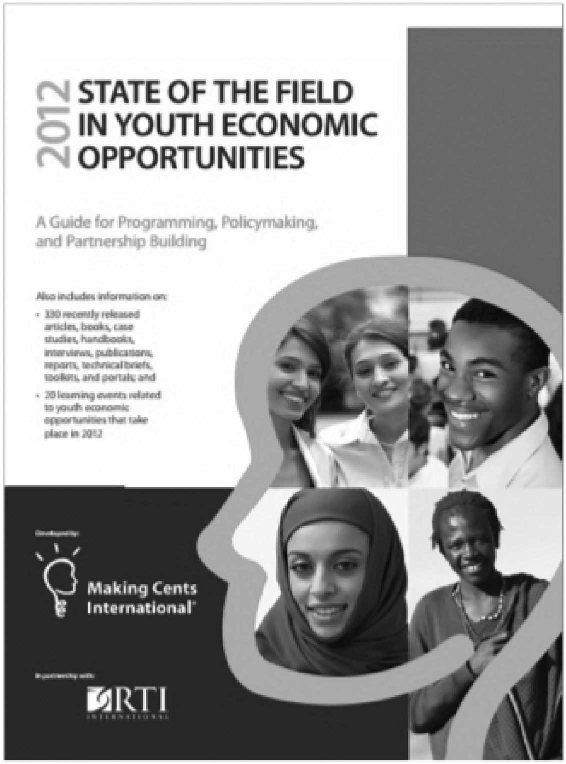
Making Cents International team at the 2007 Conference.

Gender was also high on our agenda. How did girls need to be served so they would not become disadvantaged women? I was deeply influenced by the research of the Population Council and the evidence that a lot of youth programming wound up targeting better-off boys and young men because they were the "low-hanging fruit": easier to reach than girls. In my role as chair of the CAMFED USA Foundation, I witnessed the unique and deliberate work CAMFED was doing to educate girls and support young women to help tackle poverty in rural communities through a variety of economic activities.

The Making Cents staff members poured their hearts, souls, and weekends into organizing the conference and announcing it to the world. Then anxiety set in. What if no one registered? What if the conference was just us and the 15 advisory committee members sitting in a conference ballroom staring at each other? We subsidized the conference planning with revenues from our technical services. I began to worry that I wouldn't receive a salary for the fourth quarter and might even bankrupt the company.

But September of 2007 saw the first-ever global conference on youth and microenterprise. We attracted close to 300 people from 28 countries who wanted to invest their time and money to learn, share, and network with others working on these youth issues. USAID and a number of forward-looking international NGOs and private-sector companies helped underwrite our costs.

The results of the conference began filtering back even before people left. New partnerships were started; senior staff planned to revamp the M&E in their organizations; funders and future grantees found each other. In our survey, 98 percent of people said they were satisfied or very satisfied, calling it a "different kind of learn-



The 2012 edition of Making Cents International’s *State of the Field* publication.

ing event” and 70 percent wanted to return again next year. We agreed, and committed to organizing the second Global Youth Economic Opportunities Conference the next year. A significant number of people commented on how interesting it was to see the diversity of people who considered themselves part of the youth microenterprise field. Thinking back, this was a signal about how far the sector needed to move to embrace cross-sectoral youth programming.

I made a last-minute decision to leverage the contribution of each speaker by capturing, analyzing, and synthesizing their presentations in a publication entitled *Youth Microenterprise and Livelihoods: State of the Field*.[3] The publication was downloaded in 100 countries. It became an annual series and Plan International wrote that it set “a new standard for conference reports in its comprehensiveness, readability and usefulness.”[4] And a professor at American University uses the publication every year in a course on youth in international development course; she says “it provides a wealth of perspectives and initiatives that have both theoretical and practical implications… It helps students understand the role that international actors play in engaging the global development and policy communities on critical issues.”[5]

One particular finding from the conference survey influenced us in our new role of helping to fill in knowledge gaps in the youth development field: stakeholders recognized the importance of developing and delivering appropriate financial products and services to young people, but they did not know how. We knew we had to address this at the next conference. But when we reviewed the research, we found very little on this topic—and even fewer experts. What we did find was pioneering organizations that were independently piloting youth-inclusive or youth-specific financial products.

THE WHOLE IS GREATER THAN THE SUM OF ITS PARTS

Apparently, we needed more than just a conference to close the enormous knowledge gap between young people and appropriate financial products and services. How do you develop a learning event when no one knows enough to teach it—or has sufficient content to cobble together course materials? Our answer was to host a seminar course: we invited the pioneers in the sector to share their work around a series of learning questions. From this laboratory setting, the direct outcome was "Emerging Guidelines for Linking Youth to Financial Services," which is summarized in Figure 1.[6] The guidelines were published in *Enterprise Development and Microfinance.*[7] They also formed part of a briefing paper and presentation for the 2011 Microcredit Summit, the largest microfinance gathering in the world. And key lessons were highlighted in an article on cultivating the new generation of young clients published in the *Journal of Social Business*.[8] Financial institutions reported that these resources helped them to understand an untapped market and to meet both their financial and social bottom lines.[9]

Using this same approach, and involving many of the original organizations and people, Making Cents went on to facilitate the process that led to three open-source tools for youth-inclusive financial services that are now being used by organizations including the Tunisian NGO Enda Inter-Arabe, Save the Children, Freedom from Hunger, MicroSave, PEACE Ethiopia, and the Young Entrepreneurs Program in Kosovo.

By 2012, Making Cents International's youth-inclusive financial services and learning resources had reached over 200 institutions and more than 2,500 individuals through direct training and technical assistance; we had reached thousands more via websites, conferences, and other events. These learning products have influenced the development of over 30 financial products delivered to an estimated 1.5 million youth in the developing world.[10]

Meanwhile, our knowledge management (KM) activities informed the technical services side of the company. Making Cents focused more and more on financial inclusion—a top concern among the stakeholders we work with. By shifting our focus, we made the inclusion process more accessible and value-added. Advocacy-oriented interest groups had long focused on why the historically underserved groups should be better integrated into projects that would ensure broader economic growth. Instead, we focus on how inclusion could actually work in practice.

Today, financial institutions seek us out to help make their products more accessible to young people, and to prepare these young consumers to use the products to improve their livelihoods and well-being. Thus we have one foot in the door of both the financial services and non-financial services sectors. This lets us act as an honest broker, or market maker, between traditional actors in micro-enterprise and microfinance who want to better understand how to make their products more accessible to youth consumers. The market research approaches and program design methods that we have developed create opportunities for two types of groups: the advocates and the micro-enterprise organizers. They can each feed into the work on access and readiness that the other is doing. Now, instead of each side being standoffish and frustrated by the other, they have shifted to being practical allies and partners.

RAPID GROWTH OF A SECTOR

The three years between 2008 and 2011 saw an explosion of interest in the North American international development sector and in funding for youth economic development. Many different actors and donors entered the field. Suddenly, youth employment had jumped to the top of the international development agenda, especially for those working to stabilize fragile states. Then a wider consciousness developed about meeting the needs of young people and helping them become economic citizens.

Helping drive this consciousness was the World Bank's 2007 report on development and the next generation.[11] Its analysis of the demographic dividend was crucial. It explained that yes, today's world includes a greater proportion of young people than ever before, and they need a lot of services. But it saw this phenomenon as a potential advantage. These large populations of young potential workers are the engine behind rapid economic growth: now that the dependent populations (children and the elderly) are relatively smaller, especially in the developing world, surplus earnings can go into investments that drive productivity. *But* if this working population is to be productive they must learn skills and find or create employment within a specific window of time—when they need to be healthy, educated, employed, and working in a favorable policy environment. If not, an enormous uneducated and disenfranchised population could become a liability. Many development professionals were shocked to learn that for some countries, this window has closed, and for many others, it would be closing within ten years.

Then the 2008 global financial crises put a spotlight on jobs, skills, and youth unemployment. And 2010 saw the advent of the Arab Spring and the influence of the largest-ever population of young people. Private-sector companies interested in investing in emerging economies flagged a key barrier: a lack of qualified employees. Soon, public-private partnerships popped up to address this problem. And the year from August 2010 to August 2011 was declared the United Nations

Emerging Guidelines for Designing and Implementing Youth-Inclusive Financial Services

To achieve the desired impact on youth and be able to offer quality integrated financial services at scale and on a sustainable basis, financial services providers should take seven actions:

Involve youth in market research and product development. Paying attention to the particularities of the youth market and involving youth in product development processes may lead to simple yet critical changes to new and existing products and delivery channels.

Develop products and services that reflect the diversity of youth. The youth market contains sub-segments related to age (legal age), life cycle stage (marital and parental status), gender, education, employment status, and vulnerability. Consider these differences when designing and delivering products.

Ensure that youth have safe and supportive spaces. Safe spaces help build young people's confidence and enable them to take advantage of opportunities. This may involve infrastructure considerations, delivery mechanisms, and social networks.

Provide complementary non-financial services for youth, or link youth to them. Such services include mentoring, financial literacy, cultivating a savings culture, life-skills training, and support in livelihoods and workforce development.

Focus on core competencies by utilizing partnerships. Assess and complement institutional strengths and weaknesses by collaborating with youth-serving organizations, schools, training institutes, and other entities, particularly in providing safe spaces and non-financial services.

Involve community. Include family, schools, teachers, and other local groups, to mutually reinforce and enhance the effectiveness of financial and non-financial services.

Establish institutional readiness. Establish a strategic rationale for serving youth, and institutional readiness, including adaptable policies and appropriate staff capacity.

Year of Youth.

In response to these developments, we were both shaping the times and adapting to them. We changed the name of our conference to the Global Youth Economic Opportunities Conference so we could include, and reflect the importance of, cross-sector youth programming, and could welcome stakeholders focused on workforce readiness.

At our fifth anniversary conference in 2011, we looked back: five years earlier, no one could have imagined how far we had come. In my opening remarks I noted three developments.

Thanks to the determination of key funders and dedicated practitioners, we can now quantify the return on investment of investing in adolescent girls: when girls' school attendance increases 10 percent, a country's economy grows by 3 percent.[12]

We have moved from recognizing the immediacy of the issues to arming students with the skill sets to enter the present and future workforce. For example, in Liberia, universities are working with private- and public-sector partners to create Centers of Excellence in engineering and agriculture that will produce graduates prepared to meet the country's most pressing development needs.[13]

Youth represent a viable, low-risk, and growing market. Organizations around the world are serving young people with minimal reported risk to their portfolios, ranging from .03 percent to a maximum of 3 percent. Young people are showing that they may be less risky clients than adults, given the right combination of financial and non-financial services.

Our annual conference was well-regarded; USAID designated it a "go-to" annual event, as did other leading funders and international NGOs. We were told that the conference plays a unique role in bringing together disparate, yet essential, actors in the YEO world. But, I had to ask myself, how do we know we are accomplishing enough?

IS IT WORKING?

We needed to find out if more young people were getting jobs or starting businesses as a result of our learning initiatives that provided stakeholders with new knowledge, tools, and resources. In the business sector, companies can clearly assess the impact of KM: they can calculate cost savings, efficiency improvements, and increased profits. But when we use KM for international development, our bottom line is program impact. How do you structure an M&E framework to measure that kind of impact? The international development community has yet to reach consensus on a standard approach for measuring and evaluating KM activities, and often groups don't do it at all.

Making Cents makes it a top priority to evaluate our knowledge-exchange and partnership- building initiatives. We want to ensure we are facilitating high-impact, scalable, and sustainable programs. We use the Ripple Model, which includes a four-level approach, to evaluate each of our initiatives.[14] The Ripple Model recognizes the type of contributions KM can make in initiatives for socio-economic development, producing a series of "ripple" effects, each of which grows in its potential to influence. This model is based on the concept that knowledge exchange catalyzes change at various levels, as shown in the four-circle diagram.

Like a stone thrown into a pond, the delivery of a knowledge-sharing activity or tool is the first level of impact, called Knowledge Exchange. A multiplier effect activates a second ripple, Knowledge Capital, increasing the impact with the tangible and intangible results of the activity or tool (e.g., documents, skills, inspiration, relationships, procedures, etc.). At this point, the impact has the potential to

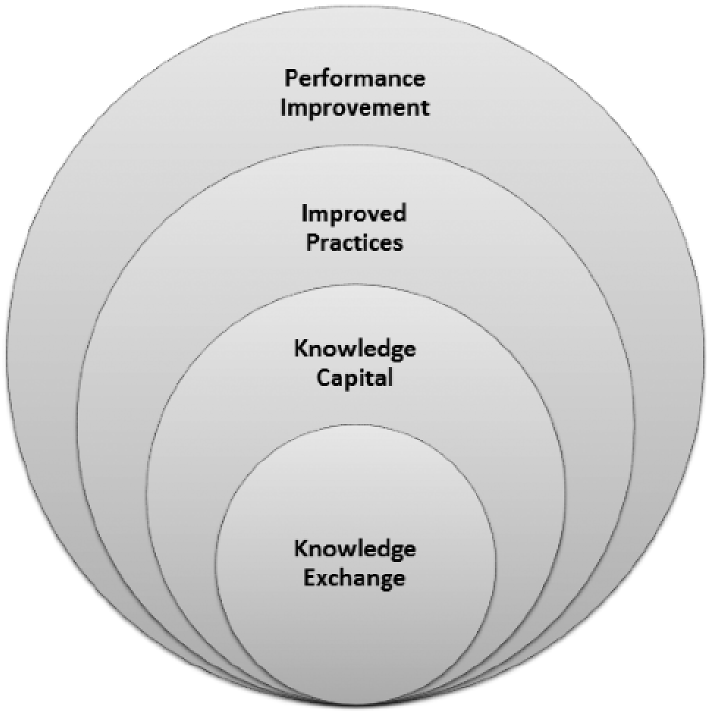


Figure 1. The Making Cents Knowledge Management M&E framework.

reach those who did not attend the event or did not have access to a document before it was shared. As individuals and organizations learn from one another, they begin to change the way they do things, deepening their impact on the third ripple: Changed Practices. Finally, people change their practices, and performance improves, leading to profound impact. We refer to this stage as Performance Improvement.

To monitor the first two levels of the framework, we collect quantitative and qualitative data through surveys and interviews with members of the YEO community. We know the reach of the conference through the number of participants and the countries they come from. We can also understand how the information being exchanged is affecting programming.

To assess the highest level of impact – improved practices and growth in program scale and sustainability and strengthened partnerships – we also collect anecdotal evidence. For example, from a survey we conducted after the 2009 conference, we learned that BRAC, the Bangladesh-based NGO, connected with Intel at our conference. The partnership they formed brought Intel computers into girls' clubs in Bangladesh. This enabled the young women whom BRAC supports to learn IT skills that boost their employability. Through interviews after the 2011 conference, we learned that World Vision applied new knowledge gained at the conference to improve its youth programming. It also gained access to organizations that provided the information it needed to develop evidence-based programming. Finally, at the 2012 conference, Fundación E of Mexico received concrete feedback on its model that supports Mexican immigrants living in the United States who hope to invest in Mexican businesses. This was vitally important to the group, as one of the first examples of a national government investing in young immigrants in the United States.

Making Cents continues to learn about learning and we plan to update and share our M&E framework as we explore the best way to do this.

THE NEXT GENERATION OF COLLABORATIVE LEARNING AND ACTION

In 2012, as Making Cents and the Global Youth Economic Opportunities Conference continued to grow and change lives, I started feeling restless again. The conference is a valuable venue for growing the YEO field, and people gain so much momentum there, but they tend to lose it with the friction of time.

More and more people asked our leadership team to do more: extend the conversations, build relationships, and continue sharing throughout the year. And, once we took a step back to consider our knowledge generation work, we renamed our KM practice area. It is now the Collaborative Learning and Action for Youth Economic Opportunities Institute, or Co-Lab. Co-Lab's strategy for 2013 to 2015 includes six activities.

1. Develop multi-year learning agendas. Currently, Co-Lab has two multi-year learning agendas that focus on technology and youth, and on economic opportunities for youth in rural areas. For the technology agenda, we are seeking answers on how the synchronous emergence of mobile technology, ubiquitous access to high-powered tools, and powerful data analytics can widen or converge inequalities across regions and between generations. Our strategy to answer these questions involves engaging the founders of companies involved in "positive disruptive" technology, including Indiegogo, Bkash, Souktel, Digital Divide Data, and SamaSource, as well as representatives of Microsoft, Facebook and others. The Citi Foundation is an instrumental funding partner in this effort, contributing field knowledge and experience gleaned from other partnerships and posing key questions to promote dialog and encourage testing new program in the broader youth development field.

Our second multi-year learning topic is intentional and informed programming for rural youth, a neglected segment of the population, along with awareness of research, tools, and proven methods for applying knowledge to one's own program. The MasterCard Foundation is supporting the collaborative learning and action agenda we call Opportunities for Youth in Rural Areas.

2. **Support applications**. How many times have you read a report, listened to a presentation, or met someone at a conference that inspired you to improve your work – and then didn't follow through? Making Cents is increasing our support to our stakeholders by sharing information in ways that others can adopt and adapt; we have launched a series of learning events we call Apply It.

3. **Scale up and involve new stakeholders.** Especially in developing countries, stakeholders often do not have a voice in, or participate in, the traditional KM activities, such as attending conferences, or publishing and broadly disseminating their work. So we are expanding the ways we give a microphone to these people, significantly aided by the global trends of increasingly ubiquitous and affordable internet access and lower cost hardware and software.

4. Leverage technology to help accomplish all of these goals. We manage www.YouthEconomicOpportunities.org to serve as a central repository and town square to share knowledge. Making Cents' Co-Lab use complementary technology to create high-tech learning opportunities that complement or supplement "high-touch" in-person events. For example, at our 2012 conference, the Enterprise Uganda Foundation presented a replicable approach to youth entrepreneurship development. People ranked the session highly and asked for more information about how to bring it into their own organizations. In response, Making Cents organized an "Apply It!" webinar to bring this tool to a global audience.

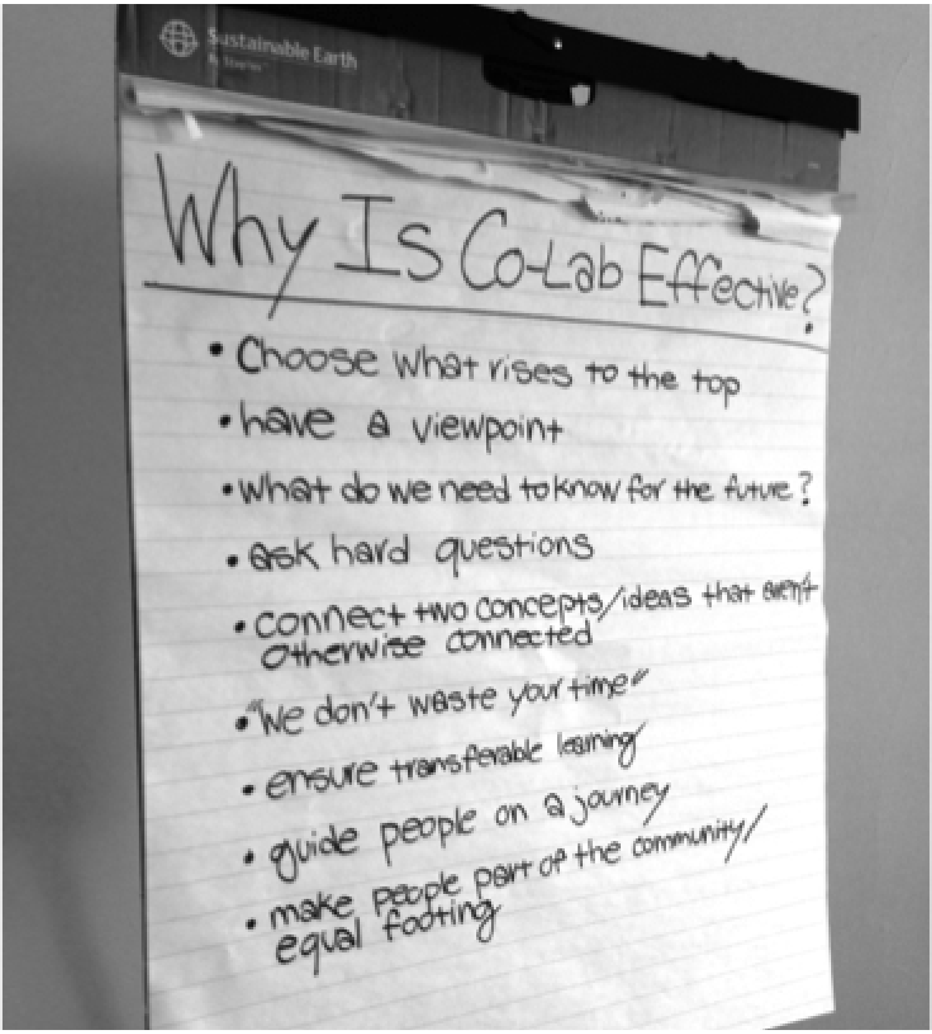
5. **Focus on innovation.** Innovation is the root of Co-Lab's work, part of our DNA. We are still experimenting. We are intrigued by examples of crowdsourcing and by its speed, but we have seen YEO actors fail in several attempts at online crowdsourcing. So we decided to try a high-touch approach. Walmart asked us how it could lower the cost of crucial soft-skills training and make it more available and accessible to those who truly need it to find work. The diverse individuals we invited to answer that question held an exciting three hours of exchange that involved drawing, debate, head-shaking, and some Ah-ha! moments. As a result, Walmart is continuing to explore the question with partners including Mozilla and the Khan Academy. It has now commissioned a survey of interested companies to develop a common baseline for core soft skills.

6. Use what's in our DNA. In our internal 2013 Co-Lab strategy session, we reviewed seven years of feedback from our global network of learning partners. We wanted to understand which of our offerings keep our partners contributing and consuming information, given the demands on their time and resources. We boiled it down to nine characteristics on a flip chart—as shown in the photo below.

After seven years of facilitating partnerships and interactive learning between stakeholders working in a range of sectors, Making Cents has established a reputation as trusted convener, knowledge hub, facilitator of dialogue, and honest broker of information and new partnerships. This lets us ask the crucial questions and elicit the honest answers that inform the development of more effective YEO programming.

WHERE DO WE GO FROM HERE?

In 2013, youth are on the radar screen of private sector, bi-lateral, and multi-lateral organizations. We all know we need to equip young people to achieve their potential. The question is how to put meat on the bones of good intentions and statistics. The YEO field acknowledges that young people need 21st-century skills, bet-



Why is the Co-Lab Effective?

ter education to prepare them for employment, and access to financial services. And more and more programming addresses the needs of girls and young women. Technology is increasingly being used to supplement or complement activities. As a sector, our job is to build on what we know works and shift the question to *how* we implement good policy and practice.

It's exciting and important to have multiple organizations working to increase economic opportunities for young people; they have an important role to play. But we also see churning and confusion about the role of each actor. I propose that we organize ourselves better so we can work more cohesively, perhaps through national and regional strategies. Our sector needs established measurement practices and standards so we can compare apples to apples—not apples to pineapples. Today, the YEO field is where the basic education field was ten years ago: people are more aware of our importance but they need to harness the urgency of the cause with more evidence-based efforts that achieve measurable results, scale, and sustainability.[15]

Youth Mainstreaming Practices

Our day-to-day work as an organization is more closely linked to practitioners in the for-profit and not-for-profit sectors than to global policy makers. Thus Making Cents is well aware of what we will need if we are to effectively include youth: both innovation in technical approaches and intervention design, and excellent public policy direction and incentives. In fact, our Co-Lab experience shows us when and why we get the genuine breakthroughs in youth inclusion: they happen less often because someone finds that investing in a given program is a good solution for youth, and more often because smart investments in youth solve a given social challenge that governments or markets want to see addressed.

A good example of this is Making Cents' current focus on youth in rural areas—which has arisen largely because donor policy has shifted towards specifically including youth in rural development (particularly agricultural) programming. Early work by youth advocates in this area focused more on what youth wanted or aspired to, and the education and training opportunities they needed to achieve that—so the resulting programs have seen youth as beneficiaries or clients of necessary social investments. Because of this perspective, the emphasis on social inclusion was often pitted against the need to be competitive: people thought that one could be achieved only at the expense of the other. Making Cents adopted a different approach: by asking instead how youth inclusion can enhance competitiveness, we are exploring not only constraints to youth inclusion but also the constraints that we can help to alleviate by including youth. Making Cents worked to integrate a rigorous youth lens into activities that assess value chains. We ask questions like these: How can youth inclusion address clear gaps in the value chain in areas such as service provision or transport? What are the binding constraints to this participation? This approach results in strategies that improve value chains. These strategies are both oriented to the market and focused on including youth. Youth participation strengthens the entire value chain, and young people are seen as full-fledged economic actors and stakeholders. As a result of mainstreaming, over the past seven years, the issue of involving youth in meaningful ways and shaping economic opportunities to serve them has moved from being nearly invisible, to being front and center.

Youth Engagement

Four teenagers in Sierra Leone taught me a lesson: how crucial it is to have youth at the table when deciding what is best for them. In 2006, Plan International held a planning workshop for a West African group developing a strategy on youth financial inclusion and skills development. During the workshop, the adult "experts" dismissed the idea that the definition of youth be extended beyond age

24. The teens from Sierra Leone jumped up horrified, waving their arms. They went on to educate us about why we needed to consider the definition of youth more carefully, and country by country. They used their country as an example. In Sierra Leone, those who are now in their late 20s were living through civil war during the years they should have been in secondary school. Programs like those the Plan offered were their second— and last—chance.

Fortunately, far more youth are having their voices and preferences heard. Foundations, corporations, governments, and civil society organizations prioritize *meaningful* youth participation. Youth are engaging in, and leading, activities across the spectrum of youth development. July 16, 2013 saw the United Nations Youth Takeover. The floor was given to Pakistani teen Malala Yousafzai, whose key message was that education is a right—and that young people demand that right be fulfilled.[16] Decisions about what to fund, who to involve, and how to implement are no longer the exclusive domain of "experts" such as government ministers, CEOs, and teachers. Youth activists demand the services and opportunities that they know they, their families, and their communities need to succeed in the 21st century.

BACK TO THE BEGINNING

As I reflect on my 18 years in economic development, my most fulfilling experiences, through our Co-Lab Institute and our technical services, have been working as part of a team of teams that provides grease, glue, and fuel to drive the YEO sector.

Khayelitsha was that Cape Town township where I led my first training using the Making Cents model. This year, Sizewe Nzima, a young man operating his business in Khayelitsha, was named by Forbes magazine as one of Africa's best young entrepreneurs under 30. I am encouraged to see that entrepreneurs and social entrepreneurs are beginning to thrive in areas where operating conditions were traditionally difficult if not impossible and few had the chance to learn entrepreneurial and employability skills. If Sizewe can come this far, imagine what the rest of the world's 1.8 billion young men and women can do. Making Cents will accompany them on their journey. Join us!

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Nicholas Davis, Ebba Hansmeyer, Branka Minic, Shantanu Prakash, and Subramanian Rangan

TEN Youth

Unlocking Enterprise Growth by Focusing on the Fortune at the Bottom of the Talent Pyramid

In 2013, the business environment in many developed economies remains sluggish. Macro fiscal and monetary support notwithstanding, business enterprises in these economies are still awaiting a robust and confident recovery in demand. Understandably, enterprises in such circumstances have focused on lowering costs and ensuring near-term profitability while placing growth and investment on the back burner. As a result, unemployment in general, and youth unemployment in particular, remains high.

In emerging economies, on the other hand, enterprises face a different growth challenge. In Brazil, China, Indonesia, India, Nigeria, and Turkey as elsewhere, enterprise growth and expansion is bottlenecked not so much by demand but by supply—specifically, the supply of workers with mid-level skills.[1] In such economies one hears of a talent drought.

Consider the case of the Dutch multinational, Philips, which some years ago secured a substantial business deal from the Zambian government. Philips was asked to provide medical equipment and technical expertise as part of a government program to improve hospital infrastructure and to make more advanced diagnostic services available to patients.

As the project matured and implementation proceeded, a major challenge emerged: there were not enough skilled radiologists, nurses, and other technical

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personnel in the local workforce to actually operate the new equipment from Philips.

Philips and its partners eventually trained more than 300 radiographers and radiologists. But as J. J. van Dongen, senior vice president for Philips Africa, observed, "If we don't have trained people to operate our machinery, then we're not doing the right job for our clients." While commenting on the huge market potential of the African continent, which includes six of the world's ten fastest-growing economies, he cautioned: "If you want to be involved in the African economy, you have to … contribute to the development of skills in Africa." [2]

The skills shortage experienced by Philips in Zambia is endemic across many emerging economies. Growth in the mining industries in Brazil[3] and Mongolia[4] has led to shortages, not only of engineers and technicians but of drivers and laborers as well. Likewise, the maquila industry along Mexico's northern border is reported to miss out on growth opportunities because it is difficult for enterprises to find experienced, bilingual sales people.[5] The outsourcing boom in India has slowed in recent years, in part because of concerns about the quality of graduates from the nation's technical and university system.[6] To be sure, the shortage of talent is present even in developed economies' growth sectors (such as the U.S. and Australian energy sector) and where an aging demographic means that skilled workers are retiring faster than they can be replaced.

Meanwhile, millions of youth around the world confront unemployment.[7] Youth have several factors that work against them in the search for employment. They are at the bottom of the talent pyramid because, understandably, most of them lack work experience. A substantial proportion do not have a college degree. Even among those with a college degree only a few have work-ready skills. Last but not least, the labor market—a mystery even to specialists and veterans—is a maze to youth. As numerous observers have lamented: youth unemployment is a grave and present danger, especially because it is known to have enduring, negative effects in terms of future employability, lifetime earnings, and health, not to mention dignity, life satisfaction, and stability in society.

In our view, which we present in this article, the dual problems of an enterprise talent shortage and youth unemployment may be addressed in a bold and fundamentally unified manner. After all, enterprises seeking to realize business growth must have an appropriately skilled and productive workforce. Moreover communities and nations seeking to improve the lives of their youth must attract fast-growing companies that bring more and better jobs. We first review traditional approaches to this vexing challenge, and then we propose a hybrid approach that we call TEN Youth. As we hope to show, especially in emerging economies, enterprises battling a talent shortage can unblock growth by focusing on the potential fortune at the bottom of the talent pyramid. In the process, they will impart skills and employment to millions of youth.

TRADITIONAL APPROACHES

The talent shortage is not a new challenge, and one may outline at least three traditional approaches to tackling it. One approach has been to call for better educational policies, including co-developing curricula with industry. In many countries, too many high school and college graduates are deemed "not job-ready." Despite having formal qualifications, young people may lack job skills that are in current demand among employers, and they may lack good habits for the workplace. Casual observation corroborates this complaint. It is evident that greater attention to education pays substantial dividends: a study of more than 100 countries over the period 1960-1995 reports a strong correlation between the extent and quality of education—especially science education—and sustained levels of GDP growth.[8] An example is the case of South Korea, where 40 years of investments in educational access, quality, and relevance to industry has helped transform that country to one of the most highly developed in the world.[9] Educational reform, however, is a formidable task. It is not only challenging to coordinate initiatives by governments and educational institutions with the changing needs of industry, but education, labor, and commerce ministries tend to focus on their own distinct domains and undertake initiatives in separate silos. Also, the education sector in many countries is insufficiently funded and less than flexible. Accordingly, while this approach has fundamental merit, its realization depends more on politics than on policy.

A second approach is for enterprises to engage in the "war for talent." Despite the rigidities just discussed, some percentage of the talent coming out of our traditional educational systems is able and excellent. In many economies, then, enterprises pursue individuals in the top quartile of their young labor pool. This creates an employment bias toward top college graduates and toward those with work experience. Rising wage premiums, turnover and retention challenges, and lower development of firm-specific skills are all known ill effects. In this approach, enterprises face not only a creeping competitiveness challenge (because of rising personnel costs) but also, more fundamentally, the overall shortage of job-ready-talent still blocks growth.

A third approach is the dual apprenticeship system practiced in Germanic countries (Austria, Germany, Switzerland). Considered a "gold standard," this model involves an ecosystem in which schools, local industry, chambers of commerce, state and local government, and teachers and students all work together in a historically coordinated and regulated manner on the development of young but job-ready vocational talent. The system is effective both in terms of high productivity and enviably low levels of youth unemployment. Big hurdles for the diffusion of this system include the considerable outlay in terms of money (thousands and sometimes tens of thousands of euros per year per candidate), time (because a candidate is in the program for two to four years), regulation, and collective action. The dual apprenticeship system is clearly an effective but high-cost, high-touch approach to unblocking the skills shortage, profitable enterprise growth, and youth employment. In a heavy industry context where capital equipment and mistakes tend to be costly, and where output is in highly engineered products, it makes good sense to invest proportionally in human capital.

In emerging economies though, where growth tends to be in service sectors (including construction, education, financial services, health care, information technology, restaurants and hospitality, real estate, retail, transportation, and utilities) and in basic manufacturing, we need and should be able to address the talent shortage and unblock enterprise growth with a leaner and more attractive model.

Accordingly, drawing inspiration from this third approach, we outline below a more affordable, appropriate, and retention-reinforced model. We have been developing the model that we refer to as TEN Youth, and the remainder of this article describes our TEN Youth reflections and work. While the specifics are less important, we hope that the principles and approach embodied in TEN will be illuminating.

TEN Youth

TEN Youth stands for the Talent Enterprises Need: Youth. It is an initiative that grew out of the World Economic Forum's Network of Global Agenda Councils – specifically the Global Agenda Council on Emerging Multinationals, and the Council on Youth Employment. As we depict in Figure 1, TEN Youth is by operated by enterprise for enterprise. In other words, enterprise engagement is a key design element. Another design element revolves around conceptualizing and categorizing essential skills (both job and behavioral skills). A third design element revolves around essential (lean) apprenticeship and essential (lean) mentoring modules. The essential apprenticeship module imparts job skills (i.e., functional skills such as web design), while the essential mentoring module fosters behavioral skills (such as reliability and flexibility). For each of these two modules, TEN Youth proposes a scalable protocol that enterprises may adopt relatively easily. While the protocol offers a detailed template, it can and must be adapted to the national, sectoral, and demographic (e.g., gender) context.

Before proceeding further, it is useful to bear in mind that enterprises express four major concerns vis-à-vis apprenticeship and mentoring. They worry about the cost in terms of money and time. They worry about post-training retention. Most firms (especially mid-sized and small firms) lack knowledge of and experience with apprenticeship and mentoring. Finally, employer sentiments sometimes reflect a distrust of youth in terms of work readiness and maturity.

When we designed TEN Youth, we factored in precisely these concerns. First, for enterprises, TEN Youth is intended to be substantially cheaper and faster than traditional apprenticeship approaches. By focusing on specific skills rather than broad-based vocational training, TEN Youth foresees apprenticeships lasting weeks or months rather than years. In addition, the aim is to have trainees productive within the first year. TEN Youth will encourage enterprises to use technology and work with external partners for the theory portion of the training. Finally the

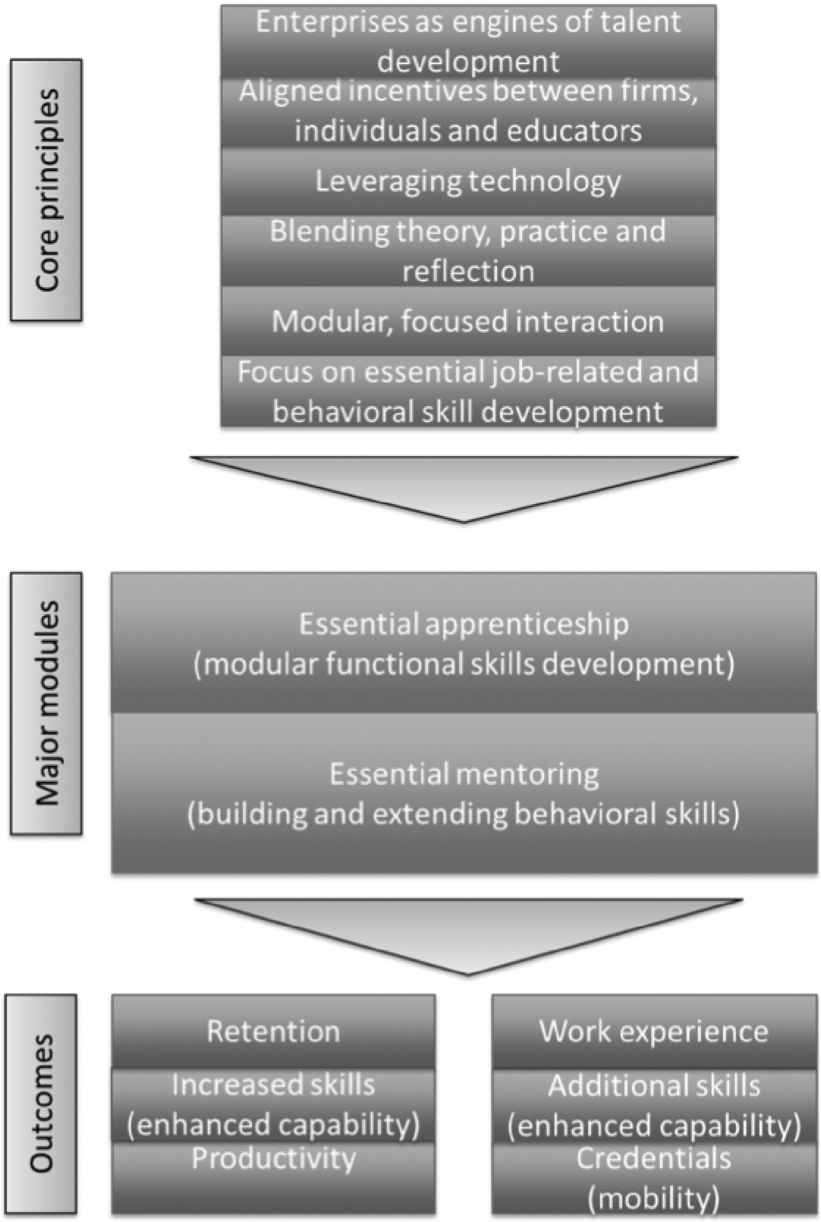

Figure 1. TEN Youth Principles, Modules, and Outcomes

design allows for trainees to help pay for this training. Second, by including a mentoring module at its core, TEN Youth aims to foster important behavioral skills and aid employee retention. Third, to make adoption feasible by mid-sized and even small enterprises, TEN Youth delivers scalable apprenticeship and mentoring protocols. This means enterprises will not have to reinvent the wheel. Last but not least, to address the issue of trust, TEN Youth includes up-front screening both for fundamental skills (such as literacy, numeracy, and language) and for the motivation to succeed.

All young people, even those with higher-level degrees, need practical skills and more opportunity to develop them through experience in the workplace. Young people want to become productive and valued employees in order to earn enough pay to achieve financial autonomy. And young people want to be socially and professionally mobile—able to move up the rungs of a career and retain the ability to move, when necessary, from employer to employer. These elements constitute what young people describe as a "real job" that provides a source of dignity in work.

A YOUTH SKILLS FRAMEWORK

If enterprises are to deepen and develop youth talent, they must focus on those skills that are essential to value creation by young employees. Accordingly, based on both the established literature and discussions with a range of employers, we conceptualized a skills framework that includes both job-related skills and behavioral skills. Job-related skills are specific, and often rapidly evolving, technical requirements for a given position. Behavioral skills encompass the personal and interpersonal abilities that are indispensable for productivity and success in the workplace.

Job-related skills[10] fall into three categories:

- Fundamental skills include literacy, numeracy, digital literacy, and language skills. We assume that these skills are developed within the primary and secondary education system. Possession of these skills represents a basic level of qualification for participants in the TEN Youth model. TEN Youth is not aimed at the development of fundamental skills, and in fact intends to make it easier for employers to identify applicants who already have these skills.
- Functional skills relate to the ability to do practical tasks informed by technical knowledge and are highly job-specific. For example, a computer technician must have specific functional skills in order to troubleshoot a hardware problem; a nurse must have a distinct set of functional skills for dressing a wound. These skills are usually developed by postsecondary vocational education and training. TEN Youth's essential apprenticeship approach aims to develop functional skills that are immediately relevant to the productivity needs of an enterprise, but not to provide a comprehensive vocational education.
- Firm-specific skills relate to an individual firm's actual systems, equipment, and operating procedures. They include, for example, knowing how to process a new insurance claim or how to invoice a client using the company's computer system. We assume that these skills will be developed gradually through on-boarding processes and on-the-job training at the firm.

Employers are increasingly acknowledging that that behavioral skills are as important as job-related skills. For many positions in service industries with significant customer interaction, behavioral skills may in fact constitute the most important source of value creation, as they ensure a positive engagement between enterprise and client.

Based on employer interviews, TEN Youth focuses on a subset of behavioral skills that are both important in the workplace and being malleable through training and mentoring interventions. We organize these in four categories:

- Reliability—being hard-working, accountable, organized, persistent, and honest; following rules and keeping commitments; having integrity and good follow-through.[11]
- Flexibility—being adaptive, responsive, and cooperative.[12]
- Future orientation—being motivated, enthusiastic; having self-control and being able to do willful planning and sustain deferred gratification.[13]
- Problem solving—being able to think critically and make decisions; having good communication and cooperation skills.[14]

Each of these skills categories correlates with a specific element of productivity and a specific kind of training/mentoring intervention. In the discussion below of apprenticeship and mentoring, we outline talent development approaches that may be readily adopted by enterprises to address these elements of an employee's overall skills portfolio.

ESSENTIAL APPRENTICESHIP

Essential apprenticeship focuses on developing functional skills that are immediately relevant to the productivity and growth of an enterprise. Data from innovative training programs around the world show that many of these skills can be developed or extended at a relatively low cost and within a relatively short time frame.[15] The goal is to help a wider range of enterprises to efficiently overcome skills barriers to growth and expansion, while simultaneously helping more young people to acquire economically relevant skills and transferable credentials.

To avoid the high costs associated with traditional models of apprenticeship, essential apprenticeship is based on simple and pragmatic links between enterprises and external training providers; is focused on flexible, modular training aimed at keeping pace with rapidly evolving talent requirements; and is designed to permit enterprises to quickly recoup their training investment (typically in less than one year for each apprentice).

The core principles of essential apprenticeship

Essential apprenticeship isolates key success factors of existing training and apprenticeship initiatives in order to provide practical guidance to enterprises interested in creating such programs on their own or in partnership with external trainers. The following seven elements represent the "core" characteristics of essential apprenticeship:

- Identify and develop only essential functional skills (as opposed to fundamental, firm-specific, or broader vocational skills).[16]

- Train only for mid-level skills—those that can be developed within a relatively short period of time among apprentices who start with a solid base of literacy, numeracy, and other fundamental skills.
- Condense the path to productivity by creating a distinct set of training modules that can be delivered in a period of days, weeks, or months, rather than years.
- Blend practice and theory. The theory portion may be provided by an external training partner and may be financed by the apprentice, with or without a subsidy.
- Leverage technology for online learning and web-based task tracking and administration to customize the apprentice's experience and to lower costs.[17]
- Certify success and create a "career passport" through testing, assessment, and delivery of a marketable credential representing an industry standard for the targeted set of skills.
- Balance incentives between the enterprise, individual, and third-party providers. The investment of time, effort and resources is recognized through appropriate wages to the individual during the apprenticeship period, shared investments of capital, and the promise of a rapid transition into a real job with real pay once the value of the training has been realized by the enterprise.

Templates for success—innovative training programs around the world

Several of the essential apprenticeship ideas we outlined above are embodied in training-for-employment initiatives operating around the globe:

- Education for Employment (EFE) operates in seven countries across the Middle East and North Africa, working with local enterprises to create recruitment and training programs that address skills bottlenecks. EFE secures hiring commitments in advance from enterprises. It recruits among unemployed young people (thereby improving access to underutilized human resources) and provides them with short-term, highly customized training specific to the needs of the enterprise. In this way EFE acts as an external resource for employers and creates tailored apprenticeship programs for its employer-clients. EFE's programs provide both job-related and behavioral skills training. To date, EFE has worked with more than 900 firms and expects to train 10,000 young people in 2013.[18]
- In Brazil, a mining company digging in a previously untapped region faced the challenge of grooming a local work force that could operate and maintain sophisticated mining equipment. The cost of importing skilled labor was becoming prohibitive for the company. Instead, the company developed an intensive, nine-month course for local young people who were eager to obtain sustainable jobs as welders, diesel repairers, equipment operators, and other mid-level skilled occupations. Classes were taught by experienced mechanics and engineers. 151 students, mostly in their 20s, graduated from the first of these classes in January, 2013. 22% of trainees were women. Virtually all of the graduates were hired by the mining company or its contractors. While developing this program represented a significant investment, the company anticipated a strong econom-

ic return from a reduction in wage inflation pressures and from the retention of loyal workers.[19]

- In Kenya, which has one of the fastest growing IT sectors in Africa, local computer and IT companies are partnering with Microsoft and an organization called NETHope to create a shared apprenticeship program for IT workers. Applicants undergo a rigorous selection process for an intensive training course and then are placed in internships with local firms. This intervention will help mitigate skills shortages in Kenya's IT industry, which is attracting foreign investment and growing at a rate of 20 percent per year.[20]

Some promising examples from the developed world (in the following three cases in the U.S.) offer lessons that may be broadly applicable in a wide range of economies:

- Year Up is a U.S.-based social enterprise that aims to close the "opportunity divide" and improve career outcomes for young people who may otherwise be headed for low-skill occupations. Focusing specifically on financial and IT positions, Year Up creates programs that link education and work more strongly. Year Up provides participants with six months of classroom-based training in technical and professional skills, followed by a six-month internship at a participating enterprise's workplace. Since its founding in 2000, Year Up has served more than 7,500 young adults; 84 percent of graduates have either been given employment, at an average wage of $30,000 per year, or are enrolled in further education; and 90 percent of corporate partners would recommend Year Up as a source of qualified workers. Year Up is actively engaged in pilot projects to embed its model within the U.S. community college system, with the goal of making internship and apprenticeship a standard component of the community college experience.[21]
- Dev Bootcamp is a San Francisco- and Chicago-based training program that describes itself as "apprenticeship on steroids." Its goal is to train qualified young people, rapidly and intensively, in a single, high-demand, immediately marketable skill. Students pay for nine weeks of full-time, classroom- and lab-based, hands-on training in web development using Ruby on Rails. Through Dev Bootcamp's close relationships with local IT companies, 88 percent of graduates find employment at an average starting salary in excess of $80,000.[22]
- Mozilla is developing an innovative concept of "badges" that take advantage of online resources to document skills more effectively. Badges can be created and issued by a wide variety of entities that certify skills. The content of the badge identifies the issuer, how the badge was earned, and links to online portfolios or testimonials further demonstrate possession of the skill. Badges are intended as a flexible way to support certification of both traditional and more innovative work-relevant skills, as they are acquired, and to help individuals present up-to-date employment and reference credentials in digital form.[23]

In each of these cases, enterprises and external partners have identified efficient ways to provide training for employment supplemented by classroom-based coursework. These approaches represent a lean, condensed version of apprenticeship that is economically efficient to operate, but that delivers appreciable upgrades to the economically relevant skills of available talent, thereby generating economic benefits to both enterprises and program participants. This approach appears to be one that can be more widely replicated by enterprises facing skills shortages.

Essential internship: Short, sharp exposure to the workplace with real skill development

While apprenticeship is aimed at developing young people for mid-level skilled positions to provide value for an enterprise over a number of years, the underlying principles may be applied to short-term engagements in internship programs. The key characteristics are:

- A focus on in-college or college-bound youth
- A commitment to impart at least one identifiable and marketable job-related functional skill
- A commitment that the intern will deliver or contribute to at least one business-relevant project
- A condensed work and learning experience lasting between four weeks and four months

Paid internships would expand access to this experience, but the traditional model of unpaid or low-paid internships would not necessarily be precluded.

While we do not see a primary directive role for government in establishing essential apprenticeship or internship, governments can help to create an enabling environment in which these initiatives can flourish. Key areas for government support include the facilitation of national credentialing systems, and tax incentives and subsidies for training.

Essential Mentoring

Whereas the essential apprenticeship approach focuses on functional skills development, essential mentoring is designed to tackle a key obstacle for youth aged 18-24—employers' perception that this group often lacks behavioral skills that enable them to operate effectively in the workplace. Of the wide range of behavioral skills covered in the literature, four have been identified by employers as critical: reliability, flexibility, future orientation, and problem-solving.

Essential mentoring is an effective and respectful way to develop these four behavioral skills and thereby increase workplace effectiveness and productivity. Essential mentoring also serves as an important complement to an enterprise's investment in essential apprenticeship by increasing retention and reducing turnover among newly trained employees.

As the name suggests, essential mentoring is based on workplace mentoring approaches and involves a relationship between a more experienced person (the mentor) and a less experienced person (the mentee or protégé) in which the goal is to encourage the personal and professional growth of the mentee.[24]

Our essential mentoring concept distills lessons from existing mentoring programs and practices in order to achieve two goals—first, to focus on the development of the four key behavioral skills that employers see as critical to value creation in their firms; and second, to make this process easier, more reliable, and less costly for enterprises so that a wider range of firms can realize the benefits of youth mentoring with low risk.

The Core Principles of Essential Mentoring

The approach that underlies essential mentoring is called "appreciative inquiry."[25] This strategy seeks to identify and reinforce things that an individual does well, rather than to criticize things that are done badly. If the goal of a particular mentoring module is, for example, to reinforce reliability, the mentor must not simply recite lectures but must probe the mentee for his or her own thoughts and experiences, provide strong reinforcement for positive behaviors and attitudes, and maintain patience and openness throughout the relationship.

The most important characteristics of essential mentoring are as follows:

- Essential mentoring is designed to serve as an integral part of the early career experience for all newly hired young people aged 18-24. It is not a grooming process for elite management trainees or a remedial strategy for disadvantaged individuals.
- The goal of essential mentoring is to develop and enhance key behavioral skills in the individual, and to thereby enhance productivity and retention for the enterprise.
- The mentoring process is based on positive psychology and the concept of appreciative inquiry. Although it is designed to engage a specific set of issues, the mentoring process is non-authoritarian. Mentors receive appropriate training so that they can apply principles of appreciative inquiry within the mentoring relationship. Mentees also receive training to help them make the most of the mentoring experience.
- The mentoring process itself, in the form of interaction between mentor and mentee, is guided by materials designed to enhance reliability and ease of implementation. However, it is also flexible, to allow for different personality and style preferences in the mentoring relationship.
- The mentoring process is supported by technology—for example, web platforms such as those developed by Chronus[26] or Everwise[27] can be used to support assessments and personality inventories that help in matching compatible mentors and mentees.
- The mentor and mentee are close in age. The mentor is slightly older and more experienced, and so may be regarded as a peer with whom the mentee can identify and form a relationship. Attention is paid to the matching of compatible mentors and mentees.

- The mentorship process lasts for a minimum of 18 months. Significant behavioral and attitudinal transformation cannot be expected within a shorter timeframe.

The Value of Mentoring

The essential mentoring approach outlined above is strongly supported by mentoring research, which identifies the primary benefits for mentored individuals as psychological reinforcement and career reinforcement. The mentoring process leaves the mentee with greater confidence, assertiveness, and leadership skills; it also leaves the mentee more knowledgeable about the organization and the ways to succeed within it, and more focused on career opportunities and strategies for achieving them.

Research shows that mentored employees demonstrate higher levels of job performance, earn more, are promoted faster, and report greater job and career satisfaction than nonmentored employees.[28] Even the mentors themselves report significant professional gains from participating in mentoring programs, including a sense of accomplishment and meaning, enhanced visibility and expanded personal networks within the organization, and improved managerial, leadership, and technical skills.

Mentoring provides significant benefits for enterprises as well as for individuals. A 2005 UK study evaluated and ranked the primary benefits of mentoring for employers.[29] It found that the existence of mentoring programs led to enhanced staff retention, improved communication, higher staff morale and motivation, and superior business learning.

Finally, mentoring has been shown to be a particularly effective strategy for modifying behavioral skills. Another study showed the "indispensability of work based learning for developing non cognitive skills, such as problem solving, teamwork and social skills."[30] Mentoring "works" for individuals because certain key skills and behaviors are best learned in the context of a relationship. Social learning theory stipulates that learning occurs through process of modeling—a mentee learns the behavioral norms of the organization from the mentor.[31] For young people in particular, mentoring has been shown to create a wide range of positive outcomes:[32]

- **Socio-emotional development:** Mentoring can serve as "emotion coaching"[33]. By listening and providing a model of effective adult communication, mentors help young mentees to better understand, express, and regulate both their positive and negative emotions, and interact more successfully with others.
- **Cognitive development:** Mentoring can facilitate young people's intellectual growth and problem-solving abilities, including information processing, abstract and relational thinking, and self-monitoring. A caring adult can create a "zone of proximal development," appropriate for the individual mentee, where the younger person is exposed to new experiences, new ideas, and new challenges

that are a "stretch" for his or her current cognitive framework but present a manageable opportunity for assimilation and learning.[34]
- **Identity development:** Young people identify with competent mentors and view them as role models; as a result mentors become "social mirrors" into which young people look to form and refine their opinions of themselves. Through acceptance, support, and regard from mentors, young people gain a sense of competence and self-worth.[35]

Given all of these advantages, it is somewhat surprising that mentoring has traditionally been confined to two extremes of the employment spectrum. In the upper professional tiers, traditional "elite" mentoring was highly selective, and focused on the cultivation of potential organizational leaders. Mentoring relationships were generally based on the interests and personality of individual senior executives, who were interested in forming like-minded protégés in their own image. The other most common sort of mentoring program involves enterprise sponsorship and staff participation in community-based youth mentoring, usually targeted toward at-risk youth from disadvantaged backgrounds who are still in school.

TEMPLATES FOR SUCCESS—INNOVATIVE MENTORING PROGRAMS AROUND THE WORLD

The essential mentoring model we outlined above is not only based on cognitive research but also inspired by the practical experience of a number of organizations that have used mentoring in the course of their talent acquisition and development process:

One prominent firm that offers mentoring to all employees is the global accounting and consulting firm, KPMG, which has been ranked as one of the most attractive companies to work for. KPMG makes mentors available to employees on all career tracks and at all professional levels. More than 15,000 employees have participated in the program. The goals of the program are "to increase employees' connection with the firm and their development," in order to ensure that they "progress and remain at KPMG throughout their careers." KPMG provides comprehensive training for mentors and mentees, and uses webcasts for the distribution of interactive training modules. KPMG undertakes formal program monitoring and surveys the satisfaction of participants, who report positive results for the program as well as enhanced career satisfaction. Mentored employees demonstrate significantly less turnover than non-participants in the program.[36]

Since 2006, The Gap has been conducting a program called This Way Ahead for youth (age 16-21) in three cities: New York, San Francisco, and Boston. The program, operated in cooperation with local nonprofits, provides 4 months of training in behavioral skills, followed by 2 weeks of training in job-specific skills to prepare candidates for 4-month internships in Gap retail stores. At the end of the internship, candidates apply for regular jobs in Gap stores, and 75% are successfully hired. The internship period includes structured coaching and mentoring from employees of the nonprofit (with an emphasis on personal support and development) and also from Gap store managers (with an emphasis on professional development). Coaching and mentoring continues for 12 months after the internship ends, to help ensure the mentee's success on the job. Plans are in process to expand the program to two new cities.[37]

Expeditors is a logistics management company with 12,000 employees in 60 countries. Their Opportunity Knocks program seeks out high school students who are not currently intending to attend college. Program participants work part time while receiving intensive mentoring on issues related to professionalism and the acquisition of marketable job skills. Young people meeting the program's performance benchmarks have the opportunity to be hired full-time by the company, which then provides formal career development opportunities for them. The program's motto is "Hire for Attitude, Train for Skill." A major factor in the creation of the program was the experience of senior vice president Dan Wall, who attributes his own success in rising from an entry-level position to the mentoring he received as a new, young employee. The program is becoming a strong part of the corporate culture, with many of the mentors citing the strong personal satisfaction they get from helping young people find their way in the workplace. While the program is currently based at Expeditors' headquarters in Seattle, the company has prepared a detailed program manual and is using it to replicate the program at many of its branch offices.[38]

In Vietnam, PepsiCo has created a structured mentoring program for new hires that, while targeted at management trainees, is focused on newly hired recent university graduates. Candidates generally have degrees in marketing, sales, or management. The 18-month program assigns participants both a job coach and a non-manager peer mentor, and the content of mentoring includes support for both technical learning tasks and behavioral skills development. The program rotates participants through different shifts and functions, and provides them with formal evaluations every six months. [39]

Conclusion

There are three criteria by which one should judge the effectiveness of remedies for talent shortage:

1. The remedy should lead to success for enterprises in acquiring and developing talent that fuels growth, profitability, and sustainability.
2. The remedy should help young job seekers to become established in gainful and meaningful careers.
3. The remedy should contribute to progress in society by improving school-to-work transitions, reducing youth unemployment, and energizing young people for economic participation.

For our part, we have incorporated the elements discussed above in TEN Youth, a model that we will in the coming months pilot, revise, and place in the public commons. If enterprise growth is to be profitable and sustainable, enterprise engagement with youth via innovative internships, apprenticeships, and mentoring will be essential. We hope our article provokes discussion and proactive enterprise engagement.

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1. We take our definition of "mid-level skills" from Robert A. Lerman and Harry J. Holzer, *America's Forgotten Middle-Skill Jobs*, Washington, DC: The Workforce Alliance, 2007, http://www.urban.org/UploadedPDF/ 411633_forgottenjobs.pdf (accessed May 24, 2013). "We define 'middle-skill' jobs as those that generally require some significant education and training beyond high school but less than a bachelor's degree. These postsecondary education or training requirements can include associate's degrees, vocational certificates, significant on-the-job training, previous work experience, or generally 'some college.'"
2. ABN Digital, "Philips Dialogue: Addressing Africa's Skills Gap—Part 1," http://www.youtube.com/watch?v=En5Ru-b9ne0
3. "Mine Workers Wanted in Brazil," *Wall Street Journal*, May 21, 2013.
4. Caden Corporation, Founex, Switzerland, unpublished internal analysis.
5. ManpowerGroup, "Paso Del Norte Labor Market Study, 2012," available at http://pasodelnorte-group.org/images/pdf/ officialpdnlabormarketstudyreport.pdf
6. "India Graduates Millions, But Too Few are Fit to Hire," *Wall Street Journal*, April 5, 2011, http://online.wsj.com/ article/SB10001424052748703515504576142092863219826.html
7. International Labour Office, *Global Employment Trends for Youth, 2013*. International Labour Organization, Geneva.
8. Robert J. Barro, "Education and Economic Growth," manuscript, Harvard University, 2000.
9. McKinsey Global Institute. *The World at Work: Jobs, Pay, and Skills for 3.5 Billion People*. McKinsey & Company, 2012, p. 58.
10. Although these skillsets are analytically separate, they may or may not be formed by separate institutions in each case. For example, a large and sophisticated enterprise might provide training in functional skills using its own resources, while a smaller firm might work with an external training partner.
11. Reliability is related to the conscientiousness and emotional stability components of the Big Five Factor Personality Model. Murray R. Barrick and Michael K. Mount, "The Big Five Personality Dimensions and Job Performance: A Meta-Analysis," *Personnel Psychology* 44(1), 1991: 1-26 found robust evidence for a close correlation between conscientiousness and job performance across all occupation groups. Jesus F. Salgado, "The Five Factor Model of Personality and Job Performance in the European Community," *Journal of Applied Psychology* 82(1), 1997: 30-43 showed that conscientiousness and emotional stability are positively associated with productivity and job performance across occupations.
12. Flexibility is related to the openness to experience (autonomy) and agreeableness components of the Big Five Factor Personality Model. Flexibility is related both to the ordinary requirements of teamwork and to successful engagement with the accelerating pace of change in the business environment.
13. Future orientation is related to the openness to experience (autonomy) component of the Big Five Factor Personality Model. Motivation directly impacts the mobilization of skills and abilities, and has been proven to increase achievement. Other components of future orientation, such as deferred gratification and wilful planning are important indicators of worker retention.
14. Problem solving is related to the agreeableness and openness to experience (autonomy) components of the Big Five Factor Personality Model. Problem solving is an essential part of every job and a pragmatic definition of success in the workplace.
15. In addition to the examples provided later in this section, a more rigorous analysis (in a developed-economy setting) is offered by Chris Hasluck, Terence Hogarth, and Duncan Adam, *The Net Benefit to Employer Investment in Apprenticeship Training: IT Apprenticeships: A Report for the Apprenticeship Ambassadors Network, University of Warwick Institute for Employment*

Research, 2009. Hasluck et. al. examined relatively low-cost and rapid-return IT apprenticeships in the UK. These apprenticeships focused on mid-level skills (NVQ Level 2 or 3), were predominantly hands-on and workplace-based (though they included a classroom component), were generally less expensive than apprenticeships in other sectors, and generally showed a positive return on employers' training investment within six months.

16. For purposes of essential apprenticeship, we envision the targeting of certifiable functional skills immediately relevant to the job at hand, rather than a broad category of related vocational skills.
17. A particularly interesting concept, under development by companies like IBM and Designing Digitally, is the simulation of expensive equipment and complicated production processes through realistic "game"-style environments. For examples and discussion see: "'Serious Game' Provides Training to Tackle Global Business Challenges," IBM News Release, February 19, 2009, available at http://www-03.ibm.com/press/us/en/pressrelease/26734.wss. See also: 3D Serious Games and Simulations, (web site), available at http:// www.3dseriousgamesandsimulations.com/.
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Trina R. Williams Shanks, Lewis Mandell, and Deborah Adams

Financial Education and Financial Access

Lessons Learned from Child Development Account Research

In the mid-1990s, a small group of academics and financial executives sat around a conference table trying to understand why, in a period of rapid economic growth, personal bankruptcies continued to escalate. Someone suggested that recent financial deregulation had engendered the proliferation of increasingly complex financial products, making it difficult for consumers to understand exactly what they were buying. This led to the hypothesis that the increase in consumer distress during good economic times probably resulted from consumers' lack of financial literacy.

From this meeting emerged the Jump$tart Coalition, a group of academics, government officials, financial institutions, and NGOs with a shared interest in promoting financial literacy. Since several of us were educators, we naturally felt that the problem of financial illiteracy could be overcome through financial education. The most logical place to begin this type of education would be the high school, where students presumably were old enough to be concerned with this type of problem and also logistically reachable.

The consensus was that financial education, focused on older high school students, could solve the national problem of financial illiteracy in 10 years. We decid-

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ed to document the magnitude of the current problem and monitor progress toward our goal through a national study of the financial literacy of high school seniors. We developed an age-appropriate test of financial literacy that had 31 questions and decided to administer it every other year for the 10 years we thought it would take to significantly reduce the problem of financial illiteracy.

During the 1997-1998 school year, we completed our first national survey of high school seniors and were not surprised to find that students answered only 57 percent of the questions correctly. Here is an example of the age-appropriate questions we used:

> Kelly and Pete just had a baby. They received money as baby gifts and want to put it away for the baby's education. Which of the following tends to have the highest growth over periods of time as long as 18 years?
>
> a) A U.S. Govt. savings bond
>
> b) A savings account
>
> c) A checking account
>
> d) Stocks

Only 14.2 percent of students chose the correct answer—that stocks tend to have a higher growth rate than savings accounts, checking accounts, or savings bonds over periods as long as 18 years. In fact, there never has been an 18-year period over the past hundred years when this was not true.

Our dismal findings about the financial literacy of young American adults attracted a great deal of press coverage and resulted (as we had hoped) in promises from educators and politicians to do something about this problem. A number of school systems added courses in personal finance to their high school curriculum, and others that had been offering such a course considered expanding it and making it mandatory.

Unfortunately, successive biennial surveys did not show that we were making any progress and the problem did not go away.[1] Average financial literacy scores fell to 51.9 percent in the 2000 study; in 2008, the last year of the Jump$tart surveys, average scores fell to 47.5 percent. Clearly we had not solved the problem in the allotted 10-year timeframe.

To make matters worse, we were not able to show that semester-long high school courses in personal finance or money management made students more financially literate. Beginning in 2000, we asked the students taking the Jump$tart test whether they had taken such a course in high school. After conducting five national surveys, we found that students who took such a course (about 20 percent of all high school students) were no more financially literate than other students.

Other studies soon began to find similar results. Despite a growing body of evidence that we had not yet found a way to make high school finance courses effective, eager lawmakers and regulators mandated that the ineffective courses be taught in an increasing number of schools. By 2009, 15 states required personal finance to be offered by all high schools and 13 required students to take such a course as a requirement for graduation. This was more than double the number of states with such mandates in 2004.

Why is this type of financial education so ineffective? It turned out that the material was just not sticking. Even though pre- and post-tests showed that students learned something in the course, tests administered some time after the course was completed showed that students retained little of what they had learned. In thinking through these unanticipated results, we began to ask ourselves how we could make such a course "stick." We recognized that young teenagers would not need to deal with most financial decisions for many years and that a high school course in personal finance is not unlike a high school course in trigonometry, which most of us have taken but few remember because it is not reinforced and it doesn't relate to problems we ordinarily encounter.

The quantitative portion of the ACT college aptitude test was an excellent predictor of financial literacy scores. It showed that numeracy, if not outright intelligence, matters most, which has been supported by other important studies.[2] A national study of college students carried out in 2008 showed that college-level courses in personal finance enhanced neither financial literacy nor demonstrable financial behavior.[3] In fact, financial literacy scores appeared to be more closely related to the quantitative nature of a student's major than to its relevance to personal finance. Students of science, social science, and engineering turned out to be the most financially literate, even though they were unlikely to have taken any finance or accounting courses. On average, financial literacy also increased monotonically with the number of years of college completed, and general education, experience, and maturity seem to matter far more than specific classes.

While those who attend college have significantly higher financial literacy scores than high school seniors, the percentage gain from attending college is much higher for African American and Hispanic American students than for White and Asian students. In 2008, high school seniors averaged a 48.3 percent score on the standard Jump$tart test of financial literacy while college students averaged 62.2 percent, a gain of 28.8 percent. This gain was 33.9 percent for African American students and 32.6 percent for Hispanic American students. For White students the gain was just 20.6 percent. This indicates that a college education has intrinsic value beyond increasing income-enhancing human capital and may help to equip students to use their income more productively throughout life. College also appears to increase the financial literacy of women more than men. In 2008, male high school seniors did about 2 percent better on the financial literacy test than females, but among college students that same year, females did about 5 percent better than males.

If providing financial education in high school and college is not effective, is it possible to remedy the situation by educating (presumably more interested) adults in the workplace? Lusardi and the Kellers did find that workplace financial education can be useful if it is mandatory and focused on a single imminent decision.[4] For example, new employees who must choose a 401k investment can benefit from need-based financial education on that specific subject at the time they make the decision. Unfortunately, pre-need financial education delivered at the workplace tends not to attract those who need it most; in fact, it often attracts “fine-tuners”—well-educated employees who enjoy learning about finance but who least need to. The employees who most need financial education are often those who chose not to pursue higher education.

Studies of the completion rates of noncompulsory adult financial education programs found them to be dismal, even among the highly educated. An excellent online program on investments that I evaluated had a completion rate of only about 5 percent among the thousands of college graduates who signed up. No matter how interested they are at the start of a class and how well-equipped they are to learn the materials, few adults ultimately are willing to put in the work required. This, again, is not surprising when we see the low percentage of adults who complete self-directed online language courses, even after paying the fee up front. Recently, the completion rate of those signing up for free Massive Online Open Courses, which are taught by some of the world’s leading professors, has averaged less than 7 percent.[5]

Thus, it is not surprising to learn that financial literacy and beneficial financial behavior among people of all ages are most strongly related to numeracy, level of education, motivation, and self-control. These are factors that also tend to be positively related to career success and the concomitant generation of higher levels of income and wealth. Financial education that is successful tends to be among people who understand well why it is important to them and to their future. Those who own assets have “skin in the game,” which makes financial education less theoretical.

If effective financial education disproportionately benefits the “haves,” we must question its social value in a period of increasingly unequal distribution of financial resources, since living standards are a function of having financial resources and the ability to use them most effectively. Should we be using scarce educational resources to further enhance the living standards of those who are already well off? I think not: financial education is worthy of social support only if it achieves worthy social goals, but we have not yet learned how to deliver it to those who need it most.

As studies have revealed the lack of effectiveness of high school financial education courses, some have suggested providing them to younger students, who may have unformed ideas about the value of savings and may not yet have developed habits of consumption and immediate gratification.[6] Patterns of behavior tend to be formed early in life, including punctuality, reliability, and even financial responsibility. My own studies of pre-high school students show some support for these theories. Interventions designed to show why saving money is practical have changed attitudes toward spending much more dramatically among younger students.[7] An experiment that rewarded students for not spending money given to them for a period of time showed that a thrift-oriented educational intervention appeared to affect behavior in the right direction.[8]

There is now some movement toward incorporating financial education into the school curriculum at all levels. Standards have been created, based partly on young children's ability to understand certain concepts and partly on the real-life relevance of financial subjects taught to students at various ages. While certainly laudable, there are practical problems with this approach, including the cost of developing teaching materials for all grade levels and in many subject areas, and the cost of training (and persuading) teachers to use them effectively. An oft-cited suggestion is to use finance examples in math when teaching fractions, decimals, compounding, and even algebra. While this will probably do no harm, it remains to be seen how effective and enduring this will be, if it can be brought to scale.

Another approach that holds promise for young students from less affluent families is to enable them to own assets, which would make financial education more personal and less theoretical. Instead of "Johnnie has $25 in the bank which earns 2 percent interest," teachers can work on examples showing the growth of the students' own funds. Moreover, rather than talking about the theoretical relationship between higher education and income, the teacher can focus on how the growth of students' savings will make it possible for them to attend college.

Recent research has shown that children from low- and moderate-income families who had school savings were at least three times more likely than those without such savings to be on course to attend and complete college.[9] A Federal Reserve study of the impact of financial education on members of the military, which found that it resulted in limited behavioral changes, also found that many soldiers benefited from having had a high school savings account, including increased likelihood of shopping for major purchases, a lower propensity to pay overdraft fees, and a lower likelihood of never paying off their credit card balances.[10]

There are several ways for children to own assets. The most basic involves having a secure place to store the students' savings. In some developing countries, for example, a safe in the school principal's office is used, and the teacher keeps a ledger book of deposits. Children also may have an account in the formal banking sector or, to take it a step further, a government program or charitable entity may "seed" student accounts with money and/or may match funds the students save on their own (see next section).

Based on what we've learned so far, it is fair to suggest that any large-scale policy that addresses children's financial literacy/capability should be grounded in empirically tested intervention models. As the next section will show, this work is worthwhile but not easy to do.

COMMUNITY-BASED PROGRAMS IN THE SEED INITIATIVE

One innovative strategy for making financial education need-based for children and youth is Child Development Accounts (CDAs), an asset-building approach originally introduced by Michael Sherraden and researched by a growing number of scholars since that time.[11] With CDAs, rather than teaching financial education material before they need it to students who may not be motivated to learn the concepts, motivation is built simultaneously with assets. When CDAs are opened for children early in life, young people grow up knowing that there is money being set aside for them. There will be a natural interest in understanding and managing one's own financial resources.

CDAs provide children and youth (in some programs up to age 24) with a safe way to save money for the future, including for postsecondary education and training. CDAs also may help children and their parents learn how to create and use a budget and develop strategies for freeing up money to save for desired goals.

Financial education is also thought to become more effective with CDAs, perhaps because financial knowledge becomes more salient with asset ownership.[12] For example, for those who have an account, compound interest is no longer an abstract financial idea but the mechanism through which the child can build savings to help pay for postsecondary education or some other future goal. Having access to a real financial product makes any learning associated with the account experiential and, therefore, personally relevant.

CDAs have been implemented in countries throughout the world in the last two decades.[13] They have been offered to diverse groups of children and youth starting as early as at birth. Many CDAs are school based but they also are offered to out-of-school children and youth. The CDAs studied most extensively to date are those opened in the U.S. through an initiative called Saving for Education, Entrepreneurship, and Downpayment (SEED). The remainder of this article discusses SEED and findings from selected SEED studies.

WHAT IS THE SEED INITIATIVE?

SEED is a demonstration to test various approaches to implementing CDAs in the U.S. that involves 12 community-based organizations and one state.[14] The community-based organizations in SEED were part of a national initiative that had practice, policy, and research components; a state SEED initiative is underway in Oklahoma at this writing.[15] Funded by a consortium of foundations, the community-based component of the SEED initiative offered CDAs to targeted groups of children and youth of diverse age, race, ethnicity, and region of origin. They were typically provided with an initial deposit and then given matching dollars for subsequent savings. Table 1 presents the location of community-based SEED programs, the number of children and youth with CDAs at each program, and their ages/school grades.

WHAT ARE CHILD DEVELOPMENT ACCOUNTS?

CDAs are savings or investment accounts designed to help children reach their future developmental goals. The accounts can be opened as early as at birth, and are a safe and productive financial tool for children, youth, and parents to accumulate assets to help pay for postsecondary education or training, a first home, or a business enterprise. Many CDAs are opened with an initial deposit from a public

State	City	Urban-Rural	Grade Level / Age Group	Number of Participants	
Arkansas	Helena/West Helena	Rural	Pre-School	75	
Michigan	Pontiac	Urban-Suburban	Pre-School	495*	
New York	New York	Urban	Pre- and Primary School	75	Age Group Sub-Total 645
Missouri	St. Louis	Urban-Suburban	Kindergarten; First Grade	73	
Illinois	Chicago	Urban	Primary School	82	
Puerto Rico	Vega Baja	Rural	Primary School	81	
Texas	Austin	Urban	Primary School	67	Age Group Sub-Total 303
Delaware	Wilmington	Urban-Suburban	6th-8th Grades	71	
Pennsylvania	Philadelphia	Urban	6th-8th Grades	75	Age Group Sub-Total 146
California	San Francisco	Urban	Secondary School (14-18)	81	
Colorado	Denver	Urban	Secondary School (14-23)	75	
Oklahoma	Tahlequah	Rural	Secondary School	74	Age Group Sub-Total 230
*Michigan SEED Pre-School Demonstration and Impact Assessment					TOTAL 1,324

Table 1. Community-based Children's Development Account Programs in the SEED Initiative

and/or private entity. Once established, children, parents, and others are encouraged to make deposits to the account; these deposits are matched by private and/or public funds.

To date, two approaches to CDAs are being studied: (1) the universal progressive CDA in concert with state and national government entities in the U.S. and other countries; and (2) the targeted CDA administered by community-based organizations (i.e., NGOs) in partnership with a financial services provider. In this article, we focus solely on CDAs that were established for low- to moderate-income

Age Group	Study Method	Authors	Key Findings
Pre-School	Descriptive Analysis	Adams & Beverly (2013)	At baseline, low-income parents of pre-school children lacked financial knowledge, but very few attended financial education. Most wanted to save, but financial practices fell short of desired outcomes. Most were only modestly integrated into financial mainstream, meaning that CDAs represented the first real access to a means to accumulate assets for future developmental uses.
	Quasi-Experimental	Marks, et al. (2009)	Few differences between CDA and comparison groups four years after program start. However, parents with pre-school children who had CDAs attached more importance to a college education. Despite financial circumstances, few parents withdrew funds from their children's SEED accounts which were for post-secondary education and training. (See, also, findings reported in this article about asset outcomes from a related study.)
	Qualitative Methods	Shanks Williams, et al. (2009)	Most non-enrollees had heard about SEED and understood the basic details of the program, but did not enroll for a variety of reasons. Many reasons had to do with perceived complexity of signing up for program and opening CDAs in the form of 529s.
Kindergarten/ First Grade	Mixed Methods	Sherraden, M. S., et al. (2007)	This study in a public primary school provided CDAs for college savings to young children. School administrative staff, teachers, children, and parents responded positively to the program. Saving patterns indicated that families can save, but structures that facilitate regular saving and increase saving rates would likely help. Financial education was successful through an after-school club, but incorporating it into the classroom was challenging.

Table 2a. Selected studies at community-based CDA programs in the SEED Initiative

children and youth by community-based organizations that were part of the SEED initiative.[16]

THE RESEARCH

What research was conducted on CDAs offered by community-based programs in the SEED initiative?

The research described here involved multiple methods applied over a number of years with children, youth, and parents at community-based SEED programs across the country. The research design was developed by researchers at the Center

Age Group	Study Method	Authors	Key Findings
Primary School	Concept Mapping	Johnson, Adams & Kim (2010)	Low-income parents with young children who have CDAs can readily identify effective institutional as well as interpersonal aspects of asset-building programs. About two-thirds of statements from parents regarding effective CDAs focused on institutional mechanisms that may enhance the ability of low-income families to build assets for their children.
	Focus Groups	Wheeler-Brooks (2011)	SEED parents rely on program staff, and appreciate the help. This is mostly positive, but may have the unintended impact of participants feeling more comfortable making deposits via CDA staff than at the bank. Parents who use direct deposit to make CDA deposits were happy with this asset building strategy, but most parents did not use direct deposit and some had inaccurate information about such arrangements. Many parents reported struggling to find money to deposit, and said the matching funds were important. Institutional structures such as accounts that are not easy to access and electronic deposits and transfers, and commitments to save a certain amount each month helped.
Secondary School	In-Depth Interviews	Scanlon & Adams (2009)	Perceived positive effects on fiscal prudence, future orientation, sense of security, financial knowledge. Perceived positive effect on self-image for savers, but negative effect on self-image for non-savers. Little perceived effect on familial relationships or community involvement.
	In-Depth Interviews	Scanlon, Buford & Dawn (2009)	Findings suggest the importance of trusted NGOs with strong ties to the targeted group for administering community-based CDAs, teaching youth to make deposits in different ways (i.e. in person and direct deposit), delivering financial education that is relevant, dynamic and compelling for youth.

Table 2b. Selected studies at community-based CDA programs in the SEED Initiative (continued)

for Social Development and the University of Kansas, and each method used in SEED had a distinct purpose. The methods we used in studying the community-based SEED programs included account monitoring, a quasi-experiment at a pre-school program, in-depth interviews with youth and the parents of young children, and a process study conducted in concert with parent focus groups. We detail selected SEED studies below, and summarize key findings in Tables 2a and 2b.

What do we know from SEED research about CDAs across age groups?

Two studies, an overall process study and an account monitoring study, were conducted at SEED programs across the country, without regard to the ages of the children and youth who opened CDAs. The process study findings from interviews with NGO administrators and SEED program staff members, and from focus groups involving parents of children who had CDAs, included the fact that SEED staff members spent much more time and effort than expected to enroll children, youth, and parents into the programs. Almost all of the SEED programs found it necessary to expand their target groups in order to reach full enrollment.[17]

Relationships between community-based organizations and financial services partners were helpful in implementing CDAs, and most SEED programs developed effective relationships with banking partners. However, some programs faced a number of unexpected banking issues that required extensive communication between program staff and their banking partners, and staff members reported having to train bank personnel about CDAs, especially when there was frequent turnover.

As in any organization, some SEED staff members were better equipped to carry out their complex roles than others. The researchers called those who felt particularly competent in their SEED positions "charismatic outreach workers."[18] They were able to effectively explain details about program operations to participants and parents while building rapport and trust with the target population.

Focus groups were conducted with SEED parents from a number of community-based programs in concert with the process study. The parents' comments led us to understand that the responsibility for CDA outreach and enrollment is probably best assigned to well-established and trusted community groups and organizations. Parents who participated in the focus groups did not express much enthusiasm for the financial education classes they were offered by SEED.

While there was a pervasive sense that CDAs represented a "good deal" that parents wanted to take advantage of, many of them were frustrated that they had not been able to maximize the amount in their children's SEED accounts. Focus group parents who did report having saved successfully said that three institutional factors about CDAs were central to their success—direct deposit, matching funds, and restricted access to their children's accounts.

The account monitoring SEED study involved all age groups and included demographic information from 10 community-based SEED programs across the U.S. and in Puerto Rico.[19] SEED participants are primarily children and youth of color from low-income families, who self-selected to participate in the program. Each program had its own target population, incentive structure, and organizational context—variation deliberately built into the overall SEED initiative, which made it possible to approximate what could be achieved under diverse circumstances from a child's infancy to young adulthood.

The youth participants ranged in age from one to twenty-three, with a median of five. About 40 percent of participants' caregivers were married, a quarter had some postsecondary degree or credential, and 64 percent were employed. About half the participants' families had gross incomes below the federal poverty guidelines, and 48 percent received some form of government assistance. Almost three-fourths of the families had a checking or savings account, or both, and almost 40 percent owned their own homes.

As of December 31, 2007, the 1,171 participants had accumulated almost $1.8 million, with an average savings of $1,518 (median of $1,093) per participant. It is important to note, however, that the initial deposit provided by the SEED program represented about half of each participant's total. The average quarterly net savings contributed by the participant or caregiver was $30. About 57 percent of participants had positive net contributions to their accounts, that is, deposits other than the initial deposit and benchmarks deposited directly by programs. For participants who did deposit private savings, mean net contributions per quarter was $43.

The SEED guidelines for the three programs with older participants permitted matched withdrawals, which allowed youth to access their funds for approved purposes, such as postsecondary education, vehicles, computers, housing, and medical expenses. Fifty-six participants made matched withdrawals totaling $128,195, with an average of $2,289 per participant (median of $1,683)

Seven percent of participants made unmatched withdrawals—a small number, given the economic situation of the participant households. In fact, 42 percent of the participants had direct ability to withdraw from their accounts, as the caregiver was the sole account custodian, but this happened infrequently.

Findings from selected SEED studies on CDAs for preschool children

At the start of the SEED initiative, the researchers developed a data-based profile of the financial knowledge, attitudes, and ownership patterns of low-income parents of preschool children in an economically distressed community.[20] Their findings included the following:

Low-income parents of preschool children lacked financial knowledge, yet few attended the free financial education classes offered by the sponsoring agency.

Only 7 percent of parents could roughly estimate the cost of annual tuition at the local community college. The vast majority overestimated the cost, usually significantly so.

Most parents reported financial behaviors that were at odds with their own beliefs and values about saving and accumulating assets. For example, 40 percent of parents reported a money-management time horizon of only one month, and almost two-thirds said they did not have a written household budget.

Most of the parents wanted to save, but their financial practices fell short of the desired outcomes.

- While nearly three-fourths of the parents had a bank account, few had any investment products such as retirement accounts, stocks, bonds, or certificates of deposit.
- CDAs represented the parents' first real opportunity to accumulate assets for their children's future development, as most were only modestly integrated into the financial mainstream.

These findings suggest the need for both financial education and access to financial products and services that are structured and incentivized to be truly inclusive of the low-income parents of preschool children. The researchers note that this approach would be consistent with emerging theory on financial capability, which is thought to require both financial knowledge and access to financial services.

Part of the research on CDAs for preschool families included a quasi-experimental design that was conducted at the largest of the community-based SEED programs. Sixty-two percent of the parents in the treatment group who completed a baseline survey took the opportunity to open a CDA, with an initial deposit from the program for their preschool-age children.[21] Approximately 31 percent of the CDAs opened by parents who consented to participate in account monitoring research received additional deposits from parents or others on behalf of the children within the first four years of the program.[22] The CDAs of this SEED program were established as state 529 plans, special tax-favored investment accounts for higher education.

A research survey conducted at this large preschool program revealed that SEED had a positive impact on the importance parents attached to a college education.[23] However, CDAs otherwise had little impact on the social and psychological outcomes of interest. Furthermore, a substantial percentage of account holders did not deposit any funds of their own. In contrast, the program did have a small percentage of high savers, who tended to be White, have a higher level of education, have higher incomes, and be banked.

There is one additional noteworthy finding. SEED CDAs established for the preschool children had initial deposits of $800 from the program that were available to parents, yet relatively few families made withdrawals, despite the difficult financial circumstances they faced and the length of time before their preschool children would be needing the accounts to pay for postsecondary education or training. This indicates that the families valued the opportunity to save for their child's education and resisted the temptation to dip into this account, honoring the commitment to restrict these resources.

About one-third of the parents of preschool children who were offered these CDAs did not enroll their children in the matched savings program, which gave researchers the chance to conduct a qualitative study of the parents of preschool children who choose not to open CDAs in the form of college savings accounts (529s).[24] They learned that most non-enrollees recalled hearing about SEED and even understood the basic details of the program. The parents gave a number of reasons for not opening a college savings account:

- It was unfair to offer an account to just one child among many
- They did not have enough money to make deposits
- They mistrusted banks
- They thought the program sounded "too easy" and that there must be "a catch"
- They were concerned that there was too much red tape
- They could not open an account due to their legal status

These findings provide insights to help make the next generation of CDA programs better.

Findings from selected SEED studies on CDAs for primary school children

Margaret Sherraden and her colleagues studied a college savings program for kindergarten and first-grade students in a public elementary school.[25] As in the SEED initiative, this program was premised on the notion that children with CDAs gain financial knowledge because they are accumulating savings in a bank account. Another premise was that these children would be more likely than others to view college as a realistic goal because they were saving to help pay for their education or training after high school.

One key finding from this study was that having institutional structures that facilitate saving would likely improve the regularity of deposits and increase overall savings. For example, the children in this CDA program earned a small amount of money for attending the afterschool I Can Save club and visited the bank regularly to make deposits as part of the club experience. Many children interviewed talked about the dollars they earned by attending the club meetings, visiting the bank, and making deposits into their accounts.

Chicago SEED: Concept Mapping

The second approach to CDAs for primary school children involves those conducted in low-income urban communities.[26] One study used participatory concept mapping methods to explore the perspectives of parents whose young children had state 529 college savings accounts. Two main questions guided this study: What do parents perceive to be the most effective components of a CDA college savings program for children? How important is each of these components in this type of CDA program?

The parents worked together to identify the effective components, first sorting them into groups that reflected their perspectives on which were related to others and then rating the importance of each component. The findings suggest that parents value CDA components that demonstrate respect for parents and those that enhance accountability, which is an effective and important element of college savings programs for young children.

While study participants felt that the respect program staff members showed them was most important in promoting saving, about two-thirds of the components parents considered effective were institutional rather than interpersonal. These features reflected institutional notions of access, information, and security, and included bank statements that are accurate, contain information about earned interest, and showed them how their money was growing.

Another SEED study of CDA programs for primary school students involved 14 focus groups with the parents of young children from seven SEED programs.[27] The study found that

- SEED staff members were generally popular and influential with the parents. In fact, they were sometimes so helpful that they even made deposits for parents. This created complications for the parents and the program's goals, since many parents felt more comfortable making deposits through the SEED program than by going to the bank themselves.
- Parents who used direct deposit to add to their child's CDA had a positive perspective on this institutional mechanism; most parents did not use, and some did not have accurate information on, electronic deposit.
- Parents reported that finding money to deposit into their CDAs was a challenge and spoke of the importance of matching funds.
- Institutional structures were reported to help parents make difficult choices, such as committing to deposit a certain amount of money each month to a child's CDA. The researcher concluded by suggesting that the institutional features of CDAs may need to be expanded to provide additional help for very low-income children and their parents.

What do we know from SEED research about CDAs for secondary school children and young adults?

A study of high school-age students with CDAs found that participants perceived positive effects of SEED on their fiscal prudence, future orientation, sense of security, and financial knowledge.[28]

In-depth interviews with the youth suggested that SEED had a positive impact on the self-image of those who were able to save but a negative effect on those who were not able to meet their savings goals. We found little evidence that the youth perceived any changes in their familial relationships or community involvement as a result of having a CDA.

Another study analyzed data on high school students who had CDAs to determine the participants' perspectives on SEED program components.[29] Findings indicate that the students perceived their SEED program to be trustworthy, and they were comfortable with the agency's primary services (employment) and secondary services (matched savings); they found the CDA match structure to be very positive; and they felt a great deal of excitement about being able to save for the future. These findings suggest that secondary school students and older youth are a population primed for saving in CDAs when such opportunities are offered by trusted agencies with strong ties to students' communities, especially if the CDA is offered in concert with employment or other income-generating programs.

Finally, the study participants often viewed both online and in-person financial education programs somewhat negatively, reporting that they were "boring" and the content "repetitive." It appears that assessing students' individual baseline financial knowledge and shaping financial education to include the most useful content would be helpful.

CONCLUDING THOUGHTS

Offering children accounts, particularly with an initial deposit or a saving incentive, may not always be feasible. However, helping young people develop positive financial behaviors and obtain relevant financial information to prevent them from making costly mistakes can help to develop productive citizens who contribute to a stable economy. If the overall goal is to encourage savings and good financial practices early in life and to establish a foundation for lifelong asset building, offering CDAs or other relevant financial products may be more effective than financial education alone. Having a real account or the opportunity to practice financial strategies may make it easier for students to retain knowledge gained from financial education.

There is still more to learn about designing and offering accounts in the most effective way, especially to reach disadvantaged children and youth. Designing information and incentives that target these young people's stage in life and their relevant short-term goals may well be an investment that will have positive social and economic returns for years to come.

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Michael Chertok and Jeremy Hockenstein

Sourcing Change
Digital Work Building Bridges to Professional Life

Sheba Achieng Otieno and her siblings were raised by a single mother in a house made of sheet metal in one of Nairobi's massive urban slums. Sheba has one wish: to create a better life for her and her siblings than the one they were born into.

Sabun Ou dreams of becoming a lawyer and helping to end corruption in Cambodia. Born into a farming family and living with a physical disability, Sabun wants a life that takes him beyond his rural childhood and the constant teasing he received.

Syna Haung's family makes baskets. Her father ascends the mountains of Cambodia's Kampot Province three times a week to gather bamboo, which her mother weaves into baskets and sells, earning just enough to subsist on day by day. Syna studies marketing at university now and plans to start her own company.

Michael Chertok is a co-founder of Digital Divide Data and currently serves as Chief Development Officer. Previously, he was a Program Officer in the Global Development Program of the Bill & Melinda Gates Foundation. Chertok also was a co-founder and served as Managing Director of Global Catalyst Foundation, the philanthropic arm of a Silicon Valley venture capital firm, and was a Digital Vision Fellow at Stanford University. Prior to this, he helped start the non-profit organization Schools Online to bring Internet access and training to more than 5,000 schools around the world. He holds a BA in Russian Studies from Yale University and an MBA and a Certificate in Public Management from the Stanford Graduate School of Business.

Jeremy Hockenstein founded Digital Divide Data (DDD) as a social enterprise in 2001 and serves as Chief Executive Officer. DDD and Jeremy have been recognized with the Skoll Award for Social Entrepreneurship as well as awards from the World Bank Development Marketplace, the IFC Grassroots Business Initiative and the Global Knowledge Partnership. Prior to starting DDD, Jeremy worked as a management consultant with McKinsey & Company and as an international nonprofit consultant. He graduated from Harvard with a B.A. in economics and earned an MBA from MIT's Sloan School of Management.

These three young, motivated, and determined people are our colleagues. We work together at Digital Divide Data (DDD), a digital services company that spans three continents, Asia, Africa, and North America. Our company's purpose is to offer these talented youth a chance to connect to the global economy, to explore their personal and professional interests, to join a community of other young professionals, and to achieve their dream of living fulfilling and rewarding lives.

In the United States we would call Sheba, Sabun, and Syna young professionals, noting that they are the first generation in their families to go to college. However, the international development community is more likely to see them as part of the "youth bulge"—that is, the largest generation with the lowest employment rate the developing world has ever seen.

Through our work in Southeast Asia and East Africa, we see firsthand the critical global development challenge presented by youth unemployment. Half of today's world population is under 25 years of age; 90 percent of these young people live in poor countries and about 88 million do not have work. Many are growing up in slums and rural areas where there are very few jobs, and most jobs that exist are in the informal sector. According to the International Labor Organization, another 152 million youth subsist on jobs that offer no real path out of poverty. Policymakers, governments, and nongovernmental organizations (NGOs) are addressing the problem because a sizable youth cohort can quickly become a source of instability if youth unemployment is not addressed.[1] Equally important is the fact that so many young people are missing the opportunity work provides for personal development and for having a sense of purpose at a critical time in their lives.

Sheba, Sabun, Syna, and our other young colleagues in Cambodia, Laos, and Kenya have shown us that one solution to these challenges is impact sourcing, which is a way to leverage a $300 billion industry known as business process outsourcing (BPO) to create jobs and opportunity.[2] As co-founders of Digital Divide Data, one of the pioneers of impact sourcing, we've seen how a private sector approach to development is succeeding where international aid often fails.

We are tremendously excited by the potential of impact sourcing to build young people's knowledge and skills and promote their long-term success, to develop talent in growing economies, and to drive economic growth. Yet we know that jobs alone are not enough. Impact sourcing can create large-scale opportunity for youth from poor families to develop themselves through education and employment, thus enabling them to build careers and lives that far surpass their childhood experiences of day-to-day survival. We envision a world in which members of the youth bulge can thrive and lead and create a better future for themselves, their families, and our planet.

The BPO industry, which involves contracting business functions out to third-party service providers, can serve as a catalyst for the young generation. Although some see it as an industry that chases low-cost labor, the sector employs several million people worldwide, especially in countries such as India, the Philippines, and China. In India alone, the BPO industry has grown from 1.2 percent of gross domestic product in 1998 to 6.4 percent in 2011.[3] In the Philippines, its growth has created more than 700,000 jobs.[4]

Call centers are the most visible part of this industry, but BPO also includes many types of back-office processing. From taking calls to helping consumers troubleshoot computer problems to providing back-office accounting functions, the industry has grown into a service behemoth that operates mostly unseen by consumers in North America, Europe, and Australia. There is no good reason to hide the reality of the people who deliver these valuable business services. Bringing BPO to the forefront of consumer consciousness will make businesses and consumers more aware of the challenges of an increasingly globalized world, propelling impact sourcing forward, and creating opportunity for youth worldwide.

The first decade of impact sourcing focused on setting up BPO companies like DDD that operate as social enterprises. These ventures fulfil both a business and a social mission by employing youth, women, and those with disabilities to deliver BPO services to global and local clients. These enterprises are now known as impact sourcing service providers, or ISSPs. They are gaining traction by delivering quality services and providing economic and social opportunities to individuals, communities, and economies.

In this article we share our experiences with the DDD model, a social enterprise we founded in 2001, which today employs 1,000 youth in Africa and Southeast Asia. More than 600 of our coworkers have earned college degrees with DDD's support while they worked in our BPO business. We offer examples of our business and youth partners and share what we learned as we refined a model that provides a sustainable solution to unemployment and poverty. These cases illustrate our vision of a world in which businesses can profit while helping the people they employ grow through education and employment. We also present some questions to guide policymakers and businesspeople who are considering using support impact sourcing to address the challenge of a world rich in young talent but short on opportunities for human development.

HOW WE STARTED

In 2001, Jeremy Hockenstein, then a consultant for McKinsey & Company, traveled to Angkor Wat and was struck by Cambodia's mixture of poverty and progress. Even though Cambodia had computer schools, few information technology (IT) jobs were available to graduates and there were no school-to-work programs to help them transition into formal-sector employment. Jeremy saw clearly that young people had limited chances to join the workforce and take part in the economic growth of a nation emerging from colonialism and war. With a group of friends, he established DDD to empower young people to leave poverty behind and become promising members of a globally and digitally connected workforce.

Jeremy then found Michael Chertok, a former teacher who had recently started a philanthropic fund at the Silicon Valley venture capital firm Global Catalyst

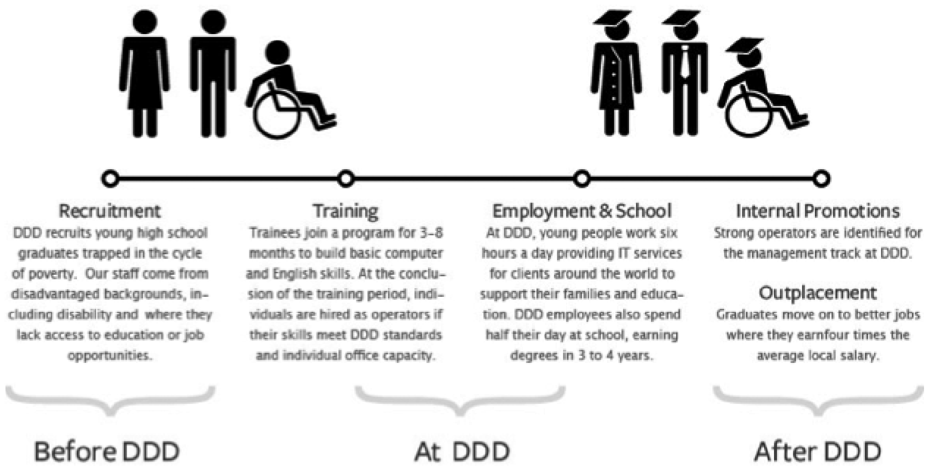

Figure 1. The DDD Model

Partners. While in college, Michael had done cost accounting data entry for a medical supply firm. The work was tedious at times, but it helped him pay for college and taught him many valuable lessons about work. Jeremy's idea of a business that employed youth in Cambodia doing BPO work made sense to Michael, so the Global Catalyst Foundation made a granted of $25,000 in seed funding to start the business.

The new venture showed early signs of success. Cyberdata, a BPO company in Delhi, India, generously offered to train two Cambodians in operations management. Another DDD cofounder, Jaeson Rosenfeld, secured a contract to digitize the historic archives of the Harvard University student newspaper, *The Crimson*. Within six months, the new business was generating enough cash to cover its operating costs.

In 2003, Michael left his job at Global Catalyst and headed for Cambodia to help grow DDD. At the time DDD was renting a storefront on a dirt road in Cambodia's capital, Phnom Penh, and employed just 60 youth. Michael lived in a room above the office and worked with our colleague Gordon Peters to train a small cohort of managers and develop plans to grow the business. This group then opened new DDD offices in Battambang, Cambodia, and Vientiane, Laos.

Over the past decade, Jeremy and Michael have worked with many people from around the world to grow DDD and increase its socioeconomic impact on the youth who work in our offices in Cambodia, Laos and Kenya. Today DDD is managed by a team of six professional managers and governed by a committed board of directors. DDD is respected by leading corporations and institutions for the quality of its services and was ranked one of the top one hundred NGOs in the world by *The Global Journal*.

THE DIGITAL DIVIDE DATA BUSINESS MODEL: HOW DOES IT WORK?

We launched DDD in 2001, when Silicon Valley was coming off the dot-com boom and many companies started by the United States' best and brightest had gone bust. The idea that companies would outsource their work to poor people in a country like Cambodia seemed improbable. However, we saw that Cambodian youth had skills, needed jobs, and were willing to work hard. Our mission then and now is to create better futures for disadvantaged young women and men in emerging economies through employment in a financially sustainable social business.

At its core, DDD is a BPO business that provides digital services to clients locally and globally. We offer a range of business services, including data entry, records management, archive digitization, Web research, and digital marketing. DDD's services help our clients create greater value from their data, documents, publications, and archives; ensure that data are accurate; and make data accessible and searchable. DDD delivers these services to corporations, governments, NGOs, universities, publishers, and libraries worldwide. Our work enables clients to reduce costs, streamline operations, serve their customers more efficiently, and gain a competitive business advantage.

We are a socially responsible business in that our operations include a work-study program that helps young people to develop their skills. This program starts by recruiting youth from very low-income families, then provides training, and culminates in a long period of employment, during which the youth also earn a college degree (see figure 1). During the four years they work at DDD, young people have a chance to learn new skills and to take on increasing responsibility in their jobs. After a probationary period, they enroll in higher education, and DDD has a schedule that allows them to attend classes while earning enough to pay the full cost of tuition with a combination of scholarships and loans.

WHY FINANCIAL SUSTAINABILITY MATTERS

Financial sustainability is a core part of DDD's philosophy and in fact is written into our mission. With our backgrounds in nonprofits, philanthropy, and business, we saw the pitfalls faced by organizations that rely on philanthropic funding. Working in countries with a history of colonialism and a culture of dependency, we knew that our local managers took enormous pride in managing a self-supporting business. And we believed that the experience of working in a customer-centric business would be an ideal learning experience for youth aspiring to professional careers. Over time we learned that it was critical for our business not just to break even but to earn a profit. We structured a hybrid organization that runs for-profit companies in the countries where we operate and is owned by a U.S.-based nonprofit. This sends a clear message to our clients and staff that we mean business while ensuring that we stay true to our mission. DDD's business in Asia is now profitable; our aim is to earn enough to fully support the cost of our work-study program, such as scholarships.

In developing countries it is challenging to establish social enterprise models that can be sustained by earned revenue. We continually refined our model to do this at DDD, particularly by developing a more business-like culture. We now aspire to achieve greater financial independence by increasing revenue and profitability, and plan to enter new markets and build systems that will let us scale and replicate our model. It is a model for the young people we serve, who want to be self-sufficient and earn their own way.

WHAT IT MEANS TO DELIVER VALUE TO BUSINESS CLIENTS

Our clients seek reliable solutions to their problems; while some value our social impact, they will not pay more for it. To succeed, therefore, DDD must deliver not just the lowest cost but on-time quality services that meet clients' needs and enable their businesses to operate smoothly and profitably. As an impact-sourcing company, we partner with socially responsible customers who give our young employees the opportunity to solve their business problems.

Ancestry.com: Increasing Value through Collaboration

Ancestry.com, the largest genealogy company in the world, is an important client for DDD. Its business involves digitizing millions of images and transcribing hundreds of millions of records from those images every year. "Ancestry.com is here to help people discover and share their family history," says Todd Jensen, senior director of document preservation. Ancestry.com maintains over 40 million family trees and more than 11 billion records. Jensen is satisfied with how DDD handles his company's historical data and digitizes records to make them searchable for its customers.

Achieving that level of satisfaction has taken effort and collaboration. Jensen met with the DDD team in Nairobi, and he suggested specific training that would help them perform the work for Ancestry more quickly and accurately. Some of DDD's Kenyan staff has traveled to Provo, Utah, to meet with the Ancestry team. "Sometimes people ask us why we work with offshore partners," he said. "The answer is pretty simple: on scale, that's where the expertise is. DDD has a solid technical infrastructure with great, talented people." Jensen likes the fact that DDD takes the time to develop talent. "DDD has a particularly high emphasis on education—it's obviously an important part of the social model, but it also allows their employees to learn quickly, making them adaptable to work that changes requirements along the way."

Developing Youth Talent

In 2002, DDD hired a young man named Kunthy Kann. Kunthy grew up on a farm in Kampong Speu, a rural province of Cambodia, in a very poor family. Through his hard work and perseverance, he graduated from high school and enrolled in a computer-skills training program. About the same time another young man, Socheat Keo, also joined the program. Doing basic work with data at DDD they both showed potential, so we gave them additional responsibilities and helped them earn bachelor's degrees. In 2003 they participated in management training, after which they wrote a business plan for a new office—the final stage of their training program, Kunthy and Socheat then opened DDD's office in Battambang, Cambodia's second largest city.

Kunthy and Socheat rapidly grew this business into a profitable operation employing one hundred people. When they left, another young DDD operator, Sopheap Im, was promoted to manage the office. She increased the staff to two hundred. Kunthy became head of DDD's Phnom Penh center, which eventually employed three hundred, making it the largest IT-based business in the country at the time. Kunthy recently was recruited to become the CEO of a rice mill. Socheat was promoted to manage the Phnom Penh operations and now oversees the work of a team of five hundred. Sopheap studied business in the United States, then returned to DDD's Phnom Penh office to manage a large and challenging client project.

At DDD, Kunthy, Socheat, and Sopheap discovered they had a knack for business and management. They developed their skills and capabilities by participating in several management training programs at DDD and by studying abroad. Kunthy, Socheat, and Sopheap are unusual in that DDD recognized their talent and commitment and promoted them to stay on as staff, but many other young men and women have used DDD as a platform to develop their strengths and to be successful in jobs outside DDD.

LEARNING FROM IMPACT SOURCING'S FIRST DECADE: EMPLOYMENT IS NOT ENOUGH

When we started DDD in the early 2000s, it was a pioneer in employing individuals from the base of the pyramid as the principal workers in a BPO business. Today that model is more widely known and is called impact sourcing. Dozens of BPO firms in countries as diverse as Bangladesh, Ghana, Haiti, Pakistan, and the United States deliver services to clients that are performed by individuals from disadvantaged backgrounds. In countries where the BPO industry is thriving, such as India and the Philippines, social entrepreneurs are bringing this model to rural areas to create employment and opportunity.

Through our experience building DDD, we have frequently thought about the impact we have made by empowering youth to emerge from poverty. While we knew that creating jobs was essential, we became convinced that providing digital work alone was not enough to bring people out of poverty. Our young employees needed a path for development, a route to developing skills and capabilities, and we needed to produce good outcomes if we were serious about helping our employees create better futures.

With our colleagues in Cambodia and Laos, we decided that the outcomes of our program should be personal development, skills development and socioeconomic development. Seeing that a job was not enough to help high school graduates obtain a better standard of living for themselves and their families, we especially aimed to create a lasting increase the income of youth after they worked at DDD. If the youth we hired could perform the work, we would commit to employ them for four years and give them the opportunity to complete higher education. This long-term intensive program has given our young employees greater economic stability than most had experienced in their lives. To date, more than 1,500 youth have participated in this work-study program and more than 600 have earned college degrees. Those who graduate from our program typically go on to higher-skilled positions. Based on data collected by a third-party evaluator who compared our outcomes with national census data, those who complete DDD's program in Asia earn far more than secondary school graduates in their country and on average even more than college graduates.

While we are inspired by the individual successes of DDD grads, it is the way these young professionals create a ripple effect of human potential by teaching others that drives us to promote impact sourcing as a development strategy. We've seen that many youth who take the step toward higher education also invest in education for their siblings. Sheba, our Kenyan coworker, is saving money to move her family out of the Mathare slums while she works at DDD, studies for a degree in accounting, and pays her brother's tuition. In our experience at DDD, we have found that the more we've believed in and invested in our young employees' dreams, the more ambitious those dreams have become.[5]

CAN IMPACT SOURCING WORK EVERYWHERE?

As we started to see the reality of bigger and brighter futures for the youth in DDD's program, especially as measured in higher incomes, we began to dream of reaching more youth. In our first ten years, DDD demonstrated the ability to manage a business sustainably, at modest scale, in two countries, Cambodia and Laos. In 2011, with support from the Rockefeller Foundation, we started operations in Kenya, where we replicated our model to create over 300 jobs, showing that our model can work on different geographies.. We are considering expanding to new locations, including Latin America, as we believe that impact sourcing has the potential to develop the capabilities of youth around the world, provided that businesses are willing to invest in building talent.

BRIGHT SPOTS IN IMPACT SOURCING AND YOUTH SOCIOECONOMIC DEVELOPMENT

As we think about the future of our field, we welcome some major shifts occurring.

Traditional Business Process Outsourcers Are Entering Impact Sourcing

While new ISSPs like DDD continue to start and grow, we're most excited by the interest from traditional BPO companies to incorporate impact sourcing into their existing business. For both business and social reasons, the BPO sector is starting to consider ways to work in more rural areas, to employ new populations, and to partner with ISSPs.

Impact sourcing enterprises like ours have called on leading traditional BPOs to realize that it is possible to simultaneously operate profitably and pursue social responsibility. Industry leaders such as Accenture and Infosys, with their scale, expansive footprints, and strong customer bases, have an opportunity to create value on both sides of the equation. Some already are exploring how to staff operations with traditionally underemployed populations. In areas where their customers value it, they can provide new and existing clients with a double-bottom-line approach that generates both social and financial return through outsourcing, which resonates with potential buyers of these services.[6]

New Investments in Digital Jobs for Youth

At the 2013 World Economic Forum in Cape Town, South Africa, the Rockefeller Foundation announced the launching of its Digital Jobs Africa initiative with an extraordinary commitment to invest nearly $100 million.[7] The initiative will create an unprecedented number of employment opportunities in countries where technology is a critical lever for development. DDD is proud to be a partner in this initiative and optimistic that its focus on creating an "ecosystem" for impact sourcing in Africa, together with direct job creation, will provide an expanded and more innovative digital platform for youth self-development. Similar investments are being made by development funders, such as the Inter-American Development Bank in Latin America, and by Boeing, Cisco Systems, Microsoft, and other large corporations.

WHAT MORE IS NEEDED?

It is a new era for impact sourcing. With more than 12 years of experience, DDD is convinced that the next decade will produce growth across our segment and expand it into other industries, and that a new ecosystem among businesses and governments will make impact sourcing a standard for the way business is done globally. In order for that to happen, three things must be in place.

Increased awareness—and demand—from businesses, governments, and institutions for impact sourcing

Any business or institution that can outsource its work can "impact-source" it. When businesses come to understand and value the double-bottom-line return of impact sourcing, they can be influential in asking traditional BPOs to adopt impact sourcing. Much as some businesses have pressured suppliers not to use child labor, businesses can drive social change through their sourcing practices. We will need significant marketing to make this value proposition visible if we are to achieve increased demand for impact sourcing.

A shared definition of success.

What standards must be adhered to and what outcomes must be produced for an initiative to qualify as impact sourcing? We need a definition of success that establishes industrywide benchmarks for impact-sourcing initiatives. The lack of such a definition could lead companies to claim they are impact sourcing for token initiatives that provide employment without transformative outcomes. Any entity that claims to be impact sourcing should be prepared to demonstrate that employees' incomes are permanently increasing.[8] There are many paths to that outcome, but above all we must not be creating another generation of working poor.

Extending impact sourcing beyond BPO

BPO services are just one example of goods and services that can be sourced in a way that produces a social return. So what else can be sourced for impact besides business services? We believe the principles employed in impact sourcing—targeted programs for skills-job matching, financial sustainability, socioeconomic inclusion—can be applied by companies in other industries. If impact sourcing is explored and developed further, other industries will be able to adapt this model to provide jobs and platforms for skill development for disadvantaged youth across the world.

The value chain of impact sourcing does not need to come from new ventures. In fact, by tweaking their mode of operating, traditional businesses can incorporate impact-sourcing practices into existing operations, including manufacturing, agricultural processing, and others that operate in emerging economies.

CONCLUSION

As ambitious as we are—and as proud as we are of our results—we at DDD are fully aware that impact sourcing currently employs fewer than 100,000 people and that tens of millions of youth are searching for opportunities to break away from poverty. We view this as a challenge, not only for ourselves and our colleagues in the impact-sourcing sector, but also for the general BPO industry, national and local governments, and the global business community.

DDD started with a few people who believed in a new way to do business. Now, hundreds of youth in Cambodia, Laos, Kenya, and other parts of the world have proved through hard work and dedication that the vision of impact sourcing is real. Hundreds of customers, investors, and volunteers have enabled this to happen. However, this shift in the way the BPO industry works is just beginning. For impact sourcing to succeed at the scale required to significantly address global poverty, people all around the world will have to advocate, innovate, and invest in solutions.

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8. For a definition of impact sourcing, see “Exploring the Value Proposition for Impact Sourcing.” The study provided a working definition of what impact sourcing is: “It looks beyond the common source of supply for traditional outsourcing to provide higher-income employment and access to new income opportunities to individuals that might not otherwise be employed in this sector.”

Akhtar Badshah and Yvonne Thomas

YouthSpark and the Evolution of a Corporate Philanthropy Program

With a strong culture of giving instilled by Microsoft's cofounders, Bill Gates and Paul Allen, corporate citizenship and philanthropy have always been a part of our DNA. With the founders' involvement more than 30 years ago, Microsoft started an employee matching gifts program, which so far has raised more than $1 billion.

Fast-forward to the start of the new millennium, when Microsoft was just 25 years old. We were already investing in a wide range of corporate citizenship projects around the world. Each project was making an impact, but the efforts were decentralized and not able to take full advantage of Microsoft's broad expertise, acumen, and resources.

To expand the effectiveness of these initiatives, we began exploring how to unite our efforts around a central strategy and audience and to align Microsoft's corporate giving programs more effectively around the company's core competencies. At the time, the international technology community was becoming increasingly aware that simply providing access to technology, or bridging the "digital divide," was not enough. Beyond learning to use computers and the Internet, people needed the knowledge to apply those skills in ways that were relevant to their lives and economic needs.

We were adamant then, and still are today, that technology in itself is not a means to an end but a tool. If we could create an approach for our corporate philanthropy that focused on teaching technology skills that people could apply to improve their own communities, we felt we could begin driving real and lasting

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change. Aligning our philanthropic efforts to reach more specific goals also would allow Microsoft to respond more effectively to local leaders' expectations and needs.

In 2003, Microsoft announced the first round of grants of a new global initiative, Microsoft Unlimited Potential (UP), which donated cash and software to 82 nonprofit organizations around the world. UP focused on providing people of all ages and abilities with free or low-cost access to technology skills training that enabled them to develop job-related technology skills, explore new careers, further their education, and become more connected in their community. Microsoft invested more than $80 million in cash and software grants during the first 12 months of the program. Ultimately, UP donated more than $400 million in cash and software to establish 70,000 community technology learning centers in at least 100 countries, working in partnership with more than 1,000 nonprofit organizations.

Over its decade of existence, the key to UP's strength has been its unified, strategic approach that has enabled people to succeed using technology. UP gave underserved rural and urban communities access to information technology (IT) for the first time. Where an Internet connection was available, communities leveraged this access for both economic and personal benefit. Many used the Internet to obtain market prices for their products or to sell their art and crafts outside their communities. Women were learning to use IT as an empowerment tool or to interact in new ways with their children, some of whom were learning to use computers and the Internet at school. Studies from the University of Washington detail how, in Europe, immigrant women were trained and empowered through the access to information the UP centers provided. In Asia, women, girls, and boys rescued from trafficking operations were able to train through our UP centers and then work from the safety of their homes, earning an income doing such things as designing business cards and letterheads for small companies. In Australia, the aboriginal community was able to preserve its traditions by linking elders to the younger generation through technology.[1] We saw that people in underserved communities around the globe were using IT to gain social and economic benefits in ways we never imagined. As we had hoped, access to technology and the Internet was opening up a whole new world of information and opportunity.

One key lesson from UP was that we could help people and communities even more effectively if we structured our work to align with their core business objectives and competencies. This understanding helped us become more effective at running programs and communicating our objectives and outcomes to communities, governments, schools, and other constituencies.

ADAPTING AND EVOLVING

By 2011, it was clear that the world had evolved. Mobile phones, laptops, and widespread Internet availability had rapidly changed the landscape of technology access, skills, needs, and workplace expectations. The technology ecosystem itself was vastly different from what it had been at the start of UP. In 2000, Microsoft was focused on providing technology access and skills training to people outside the formal education system, who might otherwise have no access to it. At that point, the greatest concern was simply getting underserved populations on line. By 2011, the fundamental questions were entirely different: If access to technology is no longer the biggest issue, how can people be empowered to do something constructive with it? How can they be engaged to work with it?

The nature of jobs and employment in the 21st century also had evolved significantly. Information and communication-technology had become a central element across industries, sectors, and job categories. Indeed, today it can be difficult to find any job in any industry that does not require at least basic familiarity with and use of technology, and advanced skills are often required. Any kind of research in biomedicine, climatology, epidemiology, or other sciences is nearly impossible without some understanding of computer programming skills. Fields like animation, digital media, gaming, even the arts also are becoming more integrated with technology.

These tectonic shifts meant that Microsoft and UP had to evolve with the changing landscape, which created an opportunity for us to rethink our strategy and programs. To stay relevant and effective, we needed to determine how we could bring our expertise and technology most effectively to underserved communities, where the gaps are especially apparent and hard to overcome in a rapidly changing economic and social environment.

THE IMPACT OF THE GLOBAL LANDSCAPE

The economic downturn that started in 2008 also informed our perception of how to approach community-focused efforts. As the impact of the global crisis began to emerge, it became clear that one population around the globe was being shut out of economic opportunities more than any other: youth.

A study commissioned by Microsoft and released in March 2012 highlights the problem. The International Youth Foundation's report, "Opportunity for Action: Preparing Youth for 21st Century Livelihoods," paints a grim picture of a systemic worldwide challenge that has no single antidote: low-quality schooling, a skills mismatch, disengaged youth, and rural-urban divides are among the multiple contributing factors facing many countries. In Spain, for example, 42 percent of youth are unemployed,[2] approximately one-third of French youth had been unemployed for more than a year in 2010,[3] and the U.S. Bureau of Labor Statistics estimated that less than one-half of U.S. youth ages 16 to 24 were employed during the summer of 2011. In the Middle East and North Africa, a mismatch between skills and the labor market has kept the youth unemployment rate the highest in the world for two decades.[4]

This report highlights how an issue that was traditionally seen as economic (i.e., providing technology access for underserved communities) could now be seen as a divide between those who have the access, skills, and opportunities to be successful and those who do not—an opportunity divide that spans geographic, cultural, educational, and national boundaries. Many youth in developed nations are not necessarily unemployed because they lack training but because they are not equipped with the right skills for employment in today's economy. Some find that their skill level is too high for the available jobs, and others simply do not have the opportunity to pursue education or employment for a host of reasons. The problems are multiple and complex, and they vary by location.

These issues are as much a challenge for Microsoft as they are for any nation or local economy. We require an educated, skilled workforce that we can rely on today and for the future. In the coming years, Microsoft and its partner companies will need to hire hundreds of thousands of people who have a particular set of skills and education. If youth are not obtaining the education, skills, and work experience that match our needs, we will have a serious problem. The same is true if we do not have a consumer base that can purchase and use our products.

All these factors helped validate the shift Microsoft was making in its philanthropic programs, a new approach that would align with the priorities of governments and societies around the world, as well as our business priorities.

THE NEXT STEP: YOUTHSPARK

When identifying our programs that were the most successful and could be built on or learned from as we developed a new approach to our corporate citizenship efforts, we found that youth was a common thread. UP was providing access to technology for kids who might not otherwise have it. Our Partners in Learning program was working with schools and policymakers to help improve 21st-century skills in K-12 education. Our work with DigiGirlz was helping stimulate girls' interest in technology. The Microsoft Imagine Cup competition was providing a way for 18- to 22-year-olds to apply their knowledge and technology in practical ways to solve pressing social problems.

Focusing our new philanthropic approach and the new direction of our efforts for youth gave us an opportunity to create a unified, cross-company effort and narrative to weave complementary programs into a single framework of outcomes, impact, and storytelling. From the lessons learned through UP, we knew that an umbrella initiative would enable us to align all our work with core themes, messages, goals, and outcomes, thereby creating greater benefit for the communities we work in and for the company.

Microsoft YouthSpark, Microsoft's new initiative launched in September 2012, has a bold goal: to help create opportunity for 300 million young people around the world by 2015. YouthSpark was created to enhance our existing efforts to empower youth through technology and to augment emerging new opportunities with philanthropic programs and resources. YouthSpark is building connections across our nearly 20 related programs to create opportunities for youth regardless of skill level, using technology to focus on the three areas where we knew youth around the world need the most support: employment, entrepreneurship, and additional education or training.[5]

While entrepreneurship has been a focus of our business groups through programs such as Microsoft BizSpark, we had not used entrepreneurship in our philanthropic efforts. However, UP showed us that in many countries youth will have to be not just job seekers but job creators. Thus, we designed YouthSpark to encompass entrepreneurship and entrepreneurial skills as important components of our work.

Microsoft YouthSpark, Microsoft's new initiative launched in September 2012, has a bold goal: to help create opportunity for 300 million young people around the world by 2015.

Through YouthSpark, we've built an approach that allows us to take a more active and direct role in driving positive outcomes. We are addressing the opportunity divide by working with partners who use Microsoft resources to empower youth through skills training and education, to help them envision and realize their future by getting into jobs, and to pursue additional education or training or start a business or social venture.

Three pillars support YouthSpark programs:

Empower. Youth are empowered through IT skills training, with a focus on helping them find jobs, pursue further training, or start their own businesses.

Imagine. YouthSpark helps youth imagine what their futures can be through programs such as Innovate for Good (see below) and the Imagine Cup.

Realize. Programs in this pillar help youth realize their future by providing access to funding through the Give for Youth micro-funding platform, by fostering entrepreneurship, and by providing employment through programs like Students to Business (see below).

Microsoft is making the largest investment in the first pillar, empower. In YouthSpark's first year, we made 90 cash grants to nonprofit partners that are working in more than 100 countries to train youth in the IT skills they need to find jobs, continue their education or training, or start their own business.

We have developed partnerships around the world that will give YouthSpark a broad reach and address the critical needs we have identified. All our partners have roots in their communities, and many receive additional funding from development agencies, local governments, and other corporations.

In China we are partnering with the China Foundation for Youth Entrepreneurship and Education to reach 80 million youth around the country and provide technology training through their 3,000 offices. Within the first three fiscal quarters of our work with the foundation, more than 68,000 youth had received training, as well as internships, microcredit loans, and additional voca-

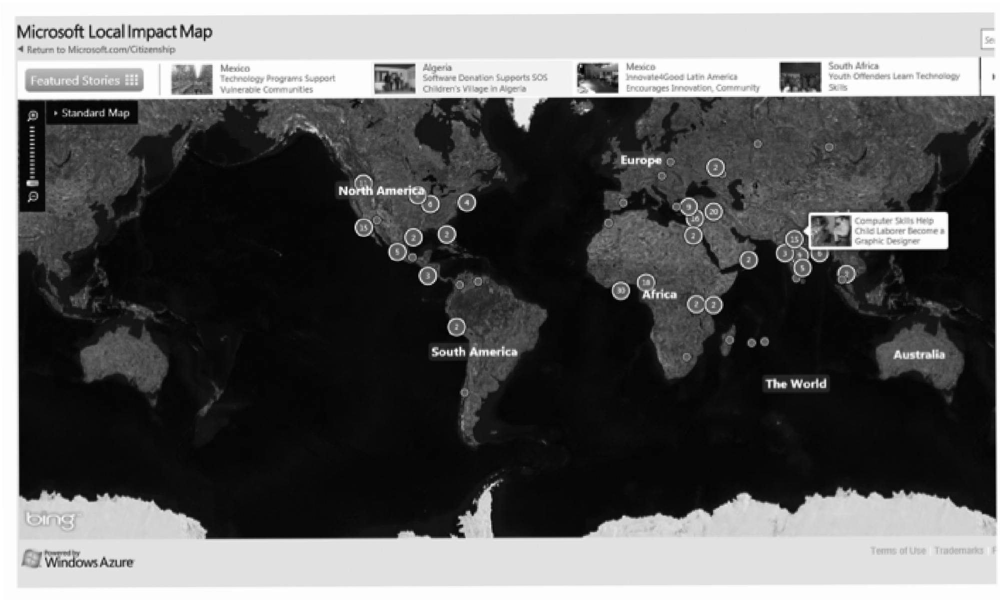

Figure 1. A map of Microsoft's local impact on youth around the world

tional training. In Latin America, we joined the New Employment Opportunities partnership launched by the International Youth Foundation, the Inter-American Development Bank, and other corporate partners to help get one million youth into jobs. In the Middle East and Africa we are working with the Silatech Foundation to develop a set of training programs, curricula, and an online portal that provides not only important skills but also critical connections to employers. The program aims to reach two million youth. In Europe we are partnering with the European Youth Forum to help one million youth across the continent improve their civic education and citizenship skills through e-learning and active engagement in society.

In the United States, we partnered with select organizations—Boys & Girls Clubs of America (BGCA), Junior Achievement (JA), City Year, Year Up, and the Network for Teaching Entrepreneurship (NFTE)—to help young people find employment, continue their education or training, or start their own business. Our YouthSpark partnership with City Year has thus far trained more than 12,000 youth, and Year Up recently enrolled 773 students at Microsoft-supported sites; 92 percent remain in the program after completing two-thirds of phase one.

Nine months into our work with NFTE, its programs are providing entrepreneurship education to more than 4,000 youth. NFTE's YouthSpark-supported programs are developing young people's entrepreneurial mindset—attitudes, skills, and knowledge—which we believe will help them achieve economic well-being. JA's partnership with Microsoft's U.S. retail stores has resulted in more than 175 in-store activities, including our flagship job shadow program and follow-up activities, through which we have reached more than 4,400 youth. We currently are working with JA to infuse more technology learning opportunities into the organization and its activities.

Finally, we are aligning our YouthSpark support with our longtime partner BGCA's flagship Keystone teen leadership program, which enables club members to work cooperatively to discover solutions that will promote social change in their communities, all with an entrepreneurial mindset. This work and our technology investments in BGCA have affected millions of youth across the United States and on U.S. military bases abroad.

Each organization we work with through our grant program has a presence in communities where Microsoft offices are located, so we can use our human capital as well as our financial and technology resources to create real impact. We have observed that for any training program to be relevant and useful to local communities, it must be more than just an access point, especially where technology is concerned. We believe our programs must be a catalyst for change and economic opportunity and must enable individuals not only to learn but to be inspired and empowered. Therefore, in addition to providing financial and technology resources, we also provide content that can help our nonprofit partners, and the youth they serve, to use technology in the ways most relevant and beneficial to them. Through the YouthSpark Hub resources such as technology skills training curricula, tools that help assess job readiness, and entrepreneurship skills training curricula, we're helping many young people use technology as a tool, prepare for jobs, and work to build their own futures.

YouthSpark's second pillar, imagine, centers on exciting the imaginations of young people who have participated in our youth-focused programs, and on leading them to apply their skills and knowledge in a practical way. We created a new program, Microsoft Innovate for Good, that brings youth together to collaborate on innovative solutions for social issues. Our small but engaged group of members, through in-person events and a private online community, provides a variety of trainings, resources, and support (including mentorships with Microsoft employees) to help bring their ideas from concept to reality, with social innovation and technology as the core building blocks.

In the last year, Innovate for Good events reached more than 2,000 youth in 73 countries. Each event helped to engage Microsoft's senior leadership and employees directly with YouthSpark. In addition to bringing socially engaged youth together for a day of learning, collaboration, and inspiration, these events enable youth from diverse segments of society in their own countries and communities to develop projects jointly. In the Middle East, for example, young women wearing the *hijab* held their own in passionate discussions with male colleagues. These events help break down traditional barriers and lead to projects where multiple, sometimes conflicting, points of view are considered, often in places around the world where youth are challenging traditional barriers.

Through these events and the Innovate for Good online community, we have started to build a committed core of young people who discuss ideas and share their projects for social change. In response to requests from these youth, we cre-

Figure 2. Youth reached by YouthSpark, by program and by country

ated a micromentoring program that connects Microsoft employees to Innovate for Good members to provide feedback or assistance; 50 Microsoft employees have signed up so far. Our long-term goal is to help those in the Innovate for Good community develop viable projects and receive the training, mentoring, and resources they need to become successful, including connections to the relevant parts of Microsoft.

The goal of our third YouthSpark pillar, realize, is to help youth find employment, become entrepreneurs, or pursue further education or training. A key effort was to give youth and youth-serving organizations a crowd-funding platform, called Give for Youth, to help support programs that are either focused on youth to achieve the goals stated above, or were started by youth with tangible, practical ideas. Through Give for Youth, nonprofit organizations and young people have a place to raise money to connect with like-minded individuals or agencies that want to help them succeed. Give for Youth was launched in September 2012, and as of July 2013 it had raised more than $1.59 million dollars from 3,200 donors, funded more than 670 projects, and affected over 30,000 youth. Through targeted matching campaigns, we're helping nonprofit organizations and the youth they serve find new ways to raise funds, support individual projects, and gain new donors to support their work. We are experimenting with ways to reach individual youth directly through this platform. One campaign alone promoted funding for five projects created by youth who had come through the Innovate for Good program. Another example is Domineisha, a young woman who shared her story on Give for Youth and raised more than 200 percent of the funds she needed to take a leave from work to further her education.

With our existing programs and these new areas of focus, we have been able to create an end-to-end effort that empowers young people through capacity-building and training, helps them imagine their future path, and then provides them a platform with which they can realize it. Today a young person could follow a path, for example, on which they participate in the Imagine Cup, pursue an interest in Web application development using Microsoft DreamSpark technology, and be hired through Students to Business, a program that connects students to internship and employment opportunities with our 600,000 global business partners.

Early indicators show that we're on the right track with YouthSpark. By joining these complementary programs, defining collective outcomes, and establishing a clear pathway for progress through the resources Microsoft has to offer, we have increased the cumulative impact of our citizenship programs.

We have built a multifaceted data-collection process that allows us to track the reach of each of our efforts. Our current data show that we are on track to reach 100 million youth in this fiscal year through YouthSpark, thus exceeding the original philanthropic outreach goals set when YouthSpark was launched (see figure 2). With this data, we can track the progress of each program in each region and country.

Since some of our YouthSpark programs and partnerships have been launched very recently, it is too early to report a significant impact, but we work closely with each partner to ensure that we are making progress along the way. Our local teams visit the projects, as do our corporate team and leaders, to track progress and to learn from our partners, the youth being served, and the beneficiaries. We also invite our partner organizations to collaborate with us at speaking events and other engagements; we invite their staff to conduct trainings at our offices; and in many places we bring our partners together annually to learn from one another.

Our experience with monitoring and evaluating UP has given us some insights into measuring the impact of YouthSpark.[6] Some of the most insightful lessons are:

- Truly engage with your nonprofit partner. Create an environment of engagement and collaboration in which the partner is supported.
- Take a long-term view when evaluating impact, but have a trackable reporting mechanism.
- Partner with organizations that have a built-in mechanism for reporting and are themselves always learning.
- Make sure the reporting process is not onerous and not out of scope for the investment being made so you receive important, relevant information.

DATA MATTER, BUT DATA ALONE DO NOT DEFINE SUCCESS AND IMPACT

These issues bring us to a big question: How is success defined across a major organizational effort that spans continents, education levels, diverse cultures, and

Technology Education and Literacy in Schools: An Example of YouthSpark's Depth

For any corporate philanthropy program to succeed, it must have financial resources. To have a deep impact and bring the best of a company to bear on an issue, it must leverage the comprehensive set of resources the company has to offer. These might include products, people, a corporate voice or market position, specific expertise, and a host of other assets. In one YouthSpark program, Technology Education and Literacy in Schools (TEALS), employees bring expertise and acumen to help the company solve a specific challenge through a long-term, systemic approach. The challenge is this: of the 42,000 high schools in the United States, only 2,100 were certified to teach advanced placement (AP) computer science courses in 2011, and only 21,139 students took the AP exam.[7] Ironically, given the growing importance of computer science, the subject accounted for only 0.6 percent of all AP tests taken last year, down from 1.6 percent of all tests in 2000.[8]

To address the significant shortage of qualified individuals to teach computer science in high school and the shortage of qualified computer scientists in the nation, Microsoft created TEALS. Employees from Microsoft and other companies go into classrooms, either in person or virtually, and teach introductory and AP computer science classes every school day for a full school year—a huge commitment of time for any individual and a significant investment by Microsoft. To date, volunteer TEALS teachers are working in 37 schools in eight states to get kids excited about a field they otherwise may not have thought of, simply because it was not offered to them.[9]

socioeconomic status? The obvious answer is measurement, to conduct studies and surveys that provide statistics to show movement and progress over time. In fall 2013, we will be sharing what we have learned and the progress YouthSpark has made during its inaugural year. The program's original goal was a lofty one: to reach 300 million youth worldwide by 2015. Last spring, just six months into the program, several encouraging signs indicated that we're on the right path.

The Innovate for Good online community and our partner, Toronto-based nonprofit TakingITGlobal, is experiencing a great deal of activity. Young members are spending an average of 7.5 minutes per visit in the youth online community.

Youth have raised funds for several social-change projects via Give for Youth, and they are refining these projects with support through Innovate for Good and Microsoft employees.

Youth from Innovate for Good are being invited to participate in the Social Innovation Summit, held each spring at the United Nations and each fall in Silicon Valley. They also are being profiled as YouthSpark Stars and getting inside access to Microsoft experts on technology and programs.

How does a company like Microsoft scale a program like this? Through partnerships with other companies and other funders. For the coming school year we have expanded the program to 65 schools and enlisted 250 volunteers, of whom 124 are from other companies. We are expanding remote teaching using virtual communication technology, such as Microsoft Lync and Skype, and looking at ways of using online teaching to further augment the classroom experience and reach more students and schools.

Furthermore, in May 2013, Washington State's governor, Jay Inslee, signed House Bill 1472, which allows AP computer science to count as a college math or science credit in Washington State high schools.[10] We are particularly proud of this hometown legislation, as many of our employees donate their time through TEALS and the bill underscores the value of this work. This legislation was a victory not just for Microsoft but for the U.S. technology sector as a whole. More importantly, it was a victory for youth. Washington's new law is a big step toward solving the problem of insufficient qualified programmers and other technology specialists. In colleges and universities all across the country, AP computer science is not considered a science or math credit. The lack of incentive has led AP computer science to become the least-popular AP course in the nation.

The Washington State law is an example of how the seeds planted by a corporate philanthropy program can come to fruition in a way that solves a challenge for everyone. It is also a clear case of what can happen when a company or philanthropic organization brings real expertise, know-how, and creativity to bear on an issue.

Give for Youth, YouthSpark's crowdsourcing site, has raised $1.2 million in the first nine months of the program and funded more than 700 projects.

The youth whose lives have been transformed through participation in these programs include:

Mary, a girl from Mombasa, Kenya, who was able to connect with a Microsoft mentor on Skype through the Global Give Back Circle. She's now at the American University of Dubai, where she serves as the first African and second female president of the school's student body. Mary recently was invited to speak with former president Clinton as part of the Clinton Global Initiative.

Jeremy, a high school student in Kentucky, who was not interested in school until he found a passion for computer science through TEALS. His teacher is a Microsoft employee who uses our teleconference technology to teach introductory computer science in Jeremy's classroom. Since discovering the subject, Jeremy is on the honor roll and plans to pursue software engineering in college.

Johnny, who was trained through the NFTE program in high school on Chicago's South Side. He went on to launch his own line of apparel while pursuing his college degree and maintaining a full-time job at a Chicago advertising firm.

Bishal, in Seattle, who has been part of the TEALS AP computer science program and attended the signing of House Bill 1472. He was admitted into Central Washington University and won a scholarship to enter the field of technology.

LESSONS WE HAVE LEARNED

The truth is, when Microsoft started these programs more than a decade ago, no one was sure where they would end up. The notion of access has changed greatly in that time, and few foresaw the ubiquity of technology and the power it would yield in 2013. By continuing to change in response to new knowledge and staying true to the company's aims, these programs have evolved and become more effective over the years. Here is the heart of what we've learned.

Connect to and leverage your company's core assets, beliefs, and competencies. To have an impact that is as relevant for your company as it is for the community, ensure that your corporate citizenship and community work link to the company's overall priorities and products. After all, any company can just give cash, but only those that invest both tangible and intangible assets will see lasting benefits for the communities they serve, and for their business, in the long term. Just as changing the life of an individual requires real engagement, achieving real change on a large scale requires more than just writing checks.

Bring your "A game." If you want your company and the communities you serve to see your work as an asset, you must bring your expertise, products and services, intellect, acumen, experience, and best people to whatever you do. And you must do so in a way that makes business sense, has measurable outcomes, and enables you to tell the story of your progress in a way that matters to the business, your community, and your key stakeholders.

All impact is local. It is crucial to partner with organizations that can implement programs locally. We have learned that, without local expertise, it is tough to create programs that are locally relevant, effective, and ultimately successful and scalable. This is why, through YouthSpark, we have partnered with local, regional, and global organizations that have deep community roots and credibility. As a partner and funder, we respect their program expertise, which is what makes the kinds of profound changes we all want to see. It is not something we can undertake on our own, nor do we believe we should.

Be critical and adaptable. Where Microsoft is today reflects the maturation of our programs, our growth in expertise, and the realization that our communities and our business need more from us. This kind of evolution is not possible without being self-critical and being comfortable letting go of things that do not make sense. Along the way we've tried new ideas, listened to feedback, seen shifts in our company and the technology industry, and been appropriately critical of ourselves. In doing so, we have shifted from being an active participant to being a driver of change. We did not get here by being a passive participant but by being actively engaged and significantly invested on multiple levels, and we're now seen as a committed and trusted partner.

Having a broader impact is what we are trying do through YouthSpark. UP reached 500 million people. Nearly 10 years into Partners in Learning, the program has reached 300 million and is still growing. Because of the lessons we've learned and our desire to drive change, we believe that, with our collective investment and commitment, we can help 300 million more youth around the world by 2015.

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Jamie McAuliffe, Jasmine Nahhas di Florio, and Pia Saunders

It's All About the Jobs

How are social entrepreneurs ensuring that programs designed to help youth find employment go beyond training or coursework to actually ensure that young people obtain meaningful employment? In the complex global arena of youth unemployment, no one brilliant idea or innovation will solve the challenge of youth unemployment but flashes of insight that fundamentally change how we approach a problem can catalyze a solution. This article describes one such important catalyst in addressing the crisis of youth unemployment in the Middle East and North Africa (MENA) region: reimagining education, not as an isolated endeavor but as one with points along the school-to-work continuum that are informed by a number of key stakeholders. This article discusses the experience of Education For Employment (EFE), an organization that a decade ago channeled a flash of insight to revamp the conventional "supply-driven" approach to youth education to become an approach to education *for employment*.

THE CHALLENGE

For a year after she graduated from university, 26-year-old Ilhem Zaghdoud from Tunisia could not secure a job. Despite having specialized in economics, her situation was, as she described it to EFE, "precarious" and her education "way too theoretical and not related to the reality of the professional world." Ilhem then spent four months in a training program where she learned goal-setting, teamwork, critical thinking, communication skills, and sales techniques. The program, delivered by EFE-Tunisie, also helped her land a job at a leading multinational that was expanding its operations in North Africa. More than six months later, Ilhem was still working, convinced that the training had given her a strong commitment to

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her customers and her employer, and a foundation that continued to influence her performance. She felt the training had transformed her beyond her professional life as well, enabling her to contribute to her family's income and building her confidence and her ability to adapt to challenges. But the most important aspect of her training, she said, was learning "how to plan my career and take ownership of my future." For the first time since she left university, Ilhem is now excited about her future and about what she can do for others to "pay forward" the impact the EFE training has had on her life.

The instability and frustration of Ilhem's situation is familiar to many youth living in the MENA region. With the world's highest percentage of youth—approximately 33 percent of the population—and the highest youth unemployment rate, one in four of the region's 100 million young people is unemployed, and a young person is four times as likely as an adult to be unemployed.[1] The issue has become an increasingly urgent priority for countries in the region and for the international community alike, as millions of Arab youth are in need of an economic future that can support human development and social cohesion.[2] Counter-intuitively, the youth unemployment crisis coincides with a demand for skilled labor that is growing faster than supply. By 2020, McKinsey & Company estimates, developing countries could have 45 million jobs for workers with secondary education that will go unfilled.[3]

Young people's frustration with the unemployment problem, as well as with corruption and a desire for political, social, and economic reforms, triggered the 2011 "Arab Spring," which erupted in Tunisia and spread across the MENA region. Without better youth employment prospects, the risk of ongoing social turmoil remains high.

Addressing the region's youth employment challenge is not simple. The International Monetary Fund contends that poor education content and delivery are critical factors that are exacerbated by demographic pressures.[4] Because education in the region does not equip youth with work skills, it also does not necessarily lead to employment. In fact, having an advanced education often increases a young person's chance of being unemployed. In Tunisia, for example, 40 percent of university graduates like Ilhem are unemployed, compared to 24 percent of youth without university degrees.[5] Moreover, there are virtually no mechanisms for connecting underserved youth to a first job after they complete their education. Without that first job, a crucial stepping stone into the professional world, young people face a cycle of unsuccessful job interviews and a bleak future.

The fact that more education does not result in better employment prospects underscores the need for a qualified labor supply in the region, which makes it difficult for employers to find the right talent in the right quantity. Fewer than half the employers polled by McKinsey consider graduates adequately prepared for work,[6] and 87 percent of CEOs polled in the Middle East believe that the limited supply of candidates with the right skills will present the biggest organizational challenge for business over the next three years.[7]

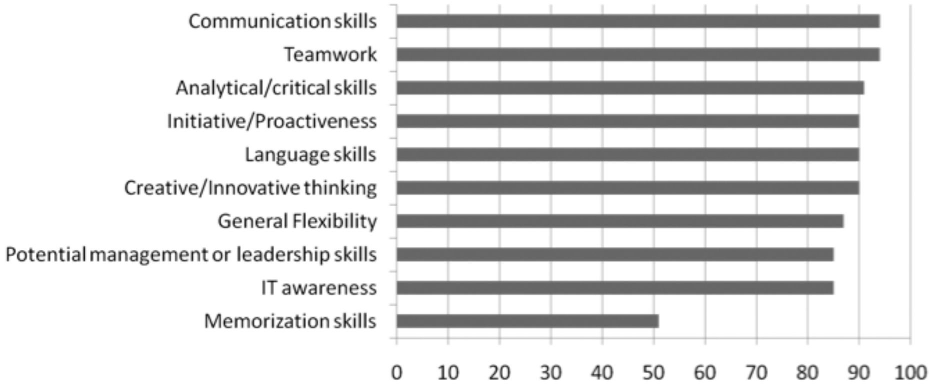

Figure 1. Types of skills considered important when recruiting graduates

Source: Mohammed Bin Rashid Al Maktoum Foundation and PricewaterhouseCoopers, "Arab Human Capital Challenge: The Voice of CEOs." Dubai, United Arab Emirates: Authors, 2008.

According to McKinsey's report on the global youth unemployment crisis, titled "Education to Employment: Designing a System that Works," "employers, education providers and youth live in parallel universes."[8] For example, they have different views about the job readiness of graduates: only 42 percent of employers and 45 percent of youth believe that new graduates are adequately prepared for entry-level jobs, whereas 72 percent of education providers hold that view. One-third of employers say they never communicate with education providers, and of those that do, fewer than 50 percent say the communication was effective. More than one-third of education providers report that they are unable to estimate the job-placement rates of their graduates, and fewer than 50 percent of youth say that they had a good understanding of the job market when they chose their course of study.[9]

One example of the mismatch between youth and employers is the skills gap. According to a report by the Al Maktoum Foundation and Pricewaterhouse-Coopers, over 600 CEOs in the MENA region believe that young graduates have not been taught the kinds of "soft skills" that are in highest demand, including teamwork, leadership, critical thinking, communication, taking initiative, and flexibility (see figure 1).[10]

Intensifying this labor mismatch are social and gender divides. Private-sector employers often are reluctant to hire youth from marginalized socioeconomic backgrounds, and youth in turn do not trust that the system will give them a fair chance. Young women, despite attaining higher levels of education, are especially vulnerable. In some MENA countries the unemployment rate among university-educated women is three to eight times that of university-educated men.[11]

RESPONSES TO THE CHALLENGE

More than training is required to resolve this issue. Young people also need to believe that they can add significant value to the companies they work for. To secure and succeed in their first jobs, they also need the confidence brought by hands-on learning and on-the-job training. Civil society organizations can help these youth by working to change attitudes, creating training and work experiences, and providing youth with ongoing opportunities to develop social capital.

According to McKinsey, it will be crucial to develop intervention models that specifically bridge the gap between education systems and employers' needs in order to create systemic change. Their "Education to Employment" report refers to two features that are common to innovative and effective programs in existence worldwide. First, education providers and employers step into each other's worlds: employers help design curricula and send employee volunteers to speak in classrooms, while education providers have students spend time at job sites and help them secure hiring commitments.[12] Second, employers and education providers work with young people early on in their training, and employers commit to hire young people before the students enroll in a training program. According to the report, the "education-to-employment journey is treated as a continuum in which employers commit to hire youth before they are enrolled in a program to build their skills."[13]

Since the Arab Spring, governments across the region have increasingly come to view youth unemployment as a top national priority. Public awareness of the issue remains high, and business leaders are looking for tangible ways to contribute to a solution. While there is clear recognition that youth employment and jobs need to be at the center of national priorities and policies, many policymakers and business leaders struggle with how to approach such a multifaceted challenge. As one organization operating since before the Arab Spring and the attendant focus on Arab youth employment, Education For Employment offers an example of a promising model that is successfully bridging the gap between school and work for Arab youth.

CASE STUDY: EDUCATION FOR EMPLOYMENT IN THE MIDDLE EAST AND NORTH AFRICA

> The genius of EFE is that it is not catering to an elite. It is talking to the general population and giving them the basic skills they need to get by on a day-to-day basis. It is maybe a small idea but it can reach millions of people.
>
> —Omar Chaabi
>
> Executive Vice President, Ynna Holding and EFE-Maroc board member

A decade ago, EFE founder Ron Bruder was inspired to pioneer a new model of employment support that would address a paradox rampant throughout the MENA region: while one in four youth was jobless, countless job openings remained unfilled due to a lack of skilled labor. Bruder's efforts were guided by a fundamental belief that, when a young person has a job, he or she develops dignity and the hope of building a future—the foundation of stable societies. Working with a group of regional experts, advisors, and business leaders from the region, Bruder established an organization that would address two key drivers of youth unemployment: the mismatch between skills offered by young job seekers and those desired by management, and the limited access to private-sector partners that had long confounded previous youth employment intervention efforts. From EFE's inception, Bruder, himself a private-sector entrepreneur who had built and sold numerous enterprises, insisted on an approach that would focus on results and be anchored by partnerships with true local ownership. EFE was launched with a singular focus on job placement and retention as the measures of success, not simply the number of youth trained. Offering programs driven by local businesses' demand for employees, locally run EFE country affiliates deliver content and secure capacity-building resources and expertise from an international network.

In its first several years, EFE set out to test this new model for securing stable, full-time employment for youth and creating locally owned and operated organizations to carry out the programming and activities most relevant to their country context.

Although EFE is now a network of local nonprofits in Egypt, Jordan, Palestine, Yemen, Morocco, and Tunisia, which are supported by organizations in the United States and Europe, the first group of young people trained by EFE graduated less than seven years ago, in the fall of 2006. Twelve young men and two young women from the Gaza Strip completed a "mini-MBA" program, and five were placed in full-time jobs upon graduation. (More job commitments had been secured but not fulfilled because of logistical complications due to the political climate.) Building on these modest beginnings, EFE began to recruit new employer partners and bring best-in-class skills training to the region.

One of the earliest problems expressed by numerous employers was the dearth of young people with very basic but fundamental work skills. Responding to this need, EFE found and adapted to the MENA region a tested soft-skills training curriculum, Workplace Success, that was originally developed by McGraw-Hill for the U.S. career college market. The curriculum uses an experiential learning methodology to teach young people necessary and relevant behavioral skills that enable them to excel in the workplace and maintain their jobs. The methodology stresses personal skill development, with a focus on interpersonal strengths and leadership, self-presentation, goal-setting, effective communication, teamwork, and time management. While a few of the skills and behaviors are taught through traditional learning methods (e.g., lectures and book learning), EFE places greater emphasis on experiential learning to deliver the content and skills necessary for success in the workplace. One technique used often in the classroom is peer- and trainer-evaluated role-playing. For example, students are asked to interview each other for a job, which gives them the opportunity to learn what it is like to be both inter-

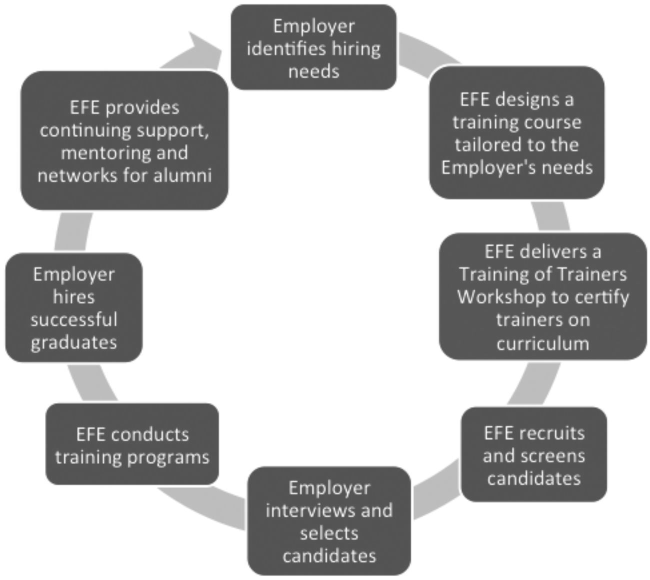

Figure 2. EFE's End-to-End Solution

viewer and interviewee. These role-play scenarios are evaluated by peers and trainers and are videotaped so the students can observe characteristics of the people involved, such as body language. Students also have one-on-one consultations with trainers to help them understand their strengths and weaknesses in developing soft skills for job success.

Over the years, EFE affiliates have built on and customized the Workplace Success training and delivery program to focus on the soft skills most valued in their local contexts. EFE-Egypt, for example, has developed a unique experiential learning model, the company simulation model, for its Workplace Success training. A typical course has 20 students divided into three "companies," each of which is instructed to perform a specific task without being taught the skills needed to complete the task. After they complete the task, the trainer lectures them about the skills needed to complete the task effectively. The "companies" are then asked to complete the task a second time. This experiential learning process allows students to understand their mistakes and practice newly acquired skills in real-time settings. The main goal is for students to develop skills through direct experience so they have the knowledge and confidence to apply the skills on the job. Feedback from participants suggests it is working: "This program is not just a training, it's a new attitude," said one graduate; another said, "The soft skills helped us to know ourselves and how to deal with others."

THE EFE BUSINESS MODEL

Crucial to EFE's effectiveness in the region are its direct partnerships with businesses, which ensure that young people are trained to the companies' specifications, and its commitment to measuring success by job outcomes rather than by training numbers alone. An EFE graduate from Jordan looks at it this way: "The others, they train us and throw us in the street. EFE gets us a job."

To begin with, EFE obtains job commitments from its employer partners and identifies their hiring needs. It then either matches its training courses to these needs, or adapts or designs courses to meet them, screens youth participants jointly with the employers, and places youth in jobs with the employer after graduation. Often, on-the-job internships of one to four weeks are included. To ensure that students succeed in their first jobs, EFE gives alumni continuing support, such as mentoring and ongoing professional development. Figure 2 summarizes this end-to-end solution that is built on a partnership with the private sector and skilled local trainers, whom EFE trains and certifies to deliver its courses.

In order to encourage repeat and new employer partners, EFE aims to provide employers with measurable, value-added services. These benefits were in fact noted in the World Education Forum report, "Talent Mobility Good Practice":[14]

- Increased recruitment capacity at reduced cost
- Access to a workforce trained in 21st-century skills needed by the business, at a subsidized rate
- Youth with a stronger work ethic, ready to work on the job from day one
- More retainable employees with the capacity to grow at the company
- Ongoing investment in staff at no cost through EFE's alumni program
- Visibility in the press and business community through EFE graduate success stories
- Membership in a network of forward-thinking local, regional, and international companies
- Opportunities to highlight corporate citizenship

EFE encourages employers to become involved by hiring EFE graduates; sponsoring EFE participants as a cost share; engaging employees as volunteers, guest speakers, and mentors for youth; providing input on program design or adapting training courses that respond to hiring needs; participating in the process of selecting youth for EFE's training programs; and donating materials, equipment, and other in-kind contributions.

This business model was tested on a small scale with early employer partners, such as Consolidated Contractors Company, one of the largest construction companies in the Middle East and EFE's partner in Palestine and Jordan; LG, the global appliance and electronics company and EFE partner in Jordan; and Banque Misr, an Egyptian bank and EFE partner in Egypt. Seven years later, the approach has resulted in partnerships with more than one thousand small, medium, large, and multinational businesses that work with EFE to provide first jobs for youth across the region.

Focusing on delivering a high-quality service to employer partners and securing advance job commitments also have yielded compelling results. By the end of

EFE's Performance Measurement and Monitoring & Evaluation Systems

EFE's Performance Measurement (PM) and Monitoring & Evaluation (M&E) Systems are internal mechanisms for identifying the EFE Network's performance in an outcomes framework and collecting feedback from key stakeholders. The performance measurement system tracks EFE's Key Performance Indicators (KPIs) on both the program and organizational levels. The M&E System is a set of tools and processes to collect in-depth information about the intermediate and long-term outcomes of direct program beneficiaries and to collect information on both programs and partnerships from key stakeholders. The M&E system employs a mixture of qualitative and quantitative methods and the tools are a mixture of surveys, key informant interviews, and focus group discussions.

The two primary objectives of EFE's performance measurement and M&E systems are to measure program outcomes and to identify appropriate areas for program adjustment. Tracking and analyzing KPIs and data collected through EFE's M&E tools allow staff to understand what is happening with the programs and to identify areas for program improvement, in areas such as program implementation or program design.

Collecting data and feedback through the M&E tools allows for easy comparisons of indicators over time and across sites. Short answer and open-ended questions provide information that can lead to a better understanding of the motivations, behaviors, and perspectives of partners, employers, and students and alumni. This information, captured by the tools as feedback from key stakeholders, can then be used by EFE to identify what is working well and what areas can benefit from adjustment.

Stakeholder Feedback

M&E tools target the following stakeholders:

Partners: Government, civil society and private sector partners who directly or indirectly support EFE programs

Beneficiaries: Directly consisting of the enrolled youth and graduates of EFE programs. Indirectly consisting of the communities, families, and friends of the youth

Trainers: Educators who facilitate in administering EFE courses, activities, and online programs

Mentors or Coaches: Individuals that provide guidance to EFE students or graduates through a formal program in partnership with EFE

Customers or Clients: Individuals or entities that consume the products or services of a business of an EFE entrepreneurship graduate

Key Performance Indicators

EFE's KPIs are tracked by affiliate M&E or program staff on a continuous basis. It is both practical and necessary for accurate outcome to track this data on an ongoing basis. KPIs are to be reported by the affiliate M&E or program staff to EFE-Global on a quarterly basis via the affiliate program data sheet approximately two weeks after the end of each calendar quarter. Quarterly performance of each affiliate is analyzed, interpreted, and discussed in an affiliate Performance Workshop in which Affiliate CEOs, program and M&E staff, and EFE-Global M&E and Program Managers identify challenges, effective strategies, and learning for program improvement purposes. EFE's KPIs are:

- Programmatic (all disaggregated by gender)
  - Graduation rate
  - 3-month job placement rate
  - 6-month job placement rate
  - 3-month job retention rate
  - Percentage continuously working
- Organization
  - # new partners (general category)
  - # new education partners
  - # new employer partners
  - # active employer partners
  - Percentage of repeat customers (employer partners)
  - $ amount of contributions from employer partners
  - $ amount of contributions from the board of directors
  - Percentage of the board of director members making a financial contribution

EFE recognized early on the importance of giving its students a voice in shaping the EFE Network's future programming and services. Some early lessons adopted as a result of graduate feedback include:

- Increasing the emphasis on educating students about the type of jobs they are likely to secure after the training to ensure their interest and commitment
- Highlighting the concept of securing a first job and moving up in the company by stages
- Incorporating language training into the program, such as business English and business French
- Holding employer partners to their commitments to ensure that graduates get the kinds of jobs they were promised and have appropriate work conditions

2011, EFE affiliates had received nearly $1 million in contributions from employer partners, and in many instances EFE surpassed its target 85 percent job placement rate for its graduates. For example, during its first year of programming in 2009, EFE-Egypt placed 100 percent of its graduates in jobs. The importance to these young people of having a meaningful and secure job quickly became evident. Young alumni would come into the office to donate a percentage of their income to the program to help their peers have the same opportunity from which they had benefited.

To ensure that it continues to operate innovatively and remains focused on concrete results, EFE, in partnership with experts from New York University, developed internal performance measurement and monitoring & evaluation (PM and M&E) systems with the objective of measuring organizational performance against its targets and identifying program areas needing adjustment.

Some of the early lessons derived from data tracked through EFE's PM and M&E systems relate to the methods used to target and select young people for the program. EFE observed that in some cases applicants did not fit the profile it had identified. This highlighted a need to examine more closely why youth with the intended profile were not applying to EFE, and why EFE's job training and placement programs were in demand by youth with a different profile. Further research into both of these questions led EFE to adjust its recruitment strategies in an effort to target the originally intended population more effectively, and to make slight adjustments to student selection criteria in an effort to serve the population most in need.

EFE ORGANIZATIONAL MODEL: IMPORTANCE OF LOCAL OWNERSHIP

Seven years of operation have affirmed the importance of EFE's locally based organizational strategy. At the time of EFE's founding, it was common for international organizations to adopt an approach that relied on U.S.-based staff and ownership. In a departure from the norm considered questionable by many at the time, EFE's founding board understood that cultivating local ownership and having "skin in the game" was critical to the organization's mission and ability to reach scale.

EFE has a local leadership, global support model; its business model is implemented across the MENA region through EFE's affiliate network of locally run nonprofits, an organizational structure uncommon in the region. Local ownership of each affiliate drives scale and sustainability. This organizational model supports EFE's market-driven approach. The board of directors of each EFE affiliate is comprised in part by business leaders in their country. This is a key to success for the market-driven approach: board members and their networks provide insights on areas of the economy that offer strong growth potential and opportunities for new jobs backed by employer commitments. These business networks also facilitate EFE's job outcomes approach by providing access to the corporate decision-makers needed to obtain job commitments and sponsorships. EFE asks employer partners to share costs, thereby flipping the standard model of subsidizing training and even employment for underserved entry-level youth who have no job experience.

EFE's global support structure facilitates partnerships that benefit the network across the MENA region, such as a recent regional agreement with the International Finance Corporation to create youth employment opportunities that will focus on high-potential sectors in the region, such as information and communications technology, hospitality, and construction.

EFE affiliates are able to leverage resources and know-how through the EFE Network, which gives them access to other EFE affiliates across the MENA region as well as support in the United States and Europe. This enables them to replicate their efficient regional partnerships with companies such as Intel, Microsoft, and Manpower Group, and EFE affiliates learn from each other to find keys to success and efficiencies to include in their own country strategies.

The local ownership structure also has engendered interest and good will among prospective supporters and partners. It has tapped into a strong level of commitment among many business leaders and politicians who were eager to contribute to their community and nation. This was underscored most recently after the Tunisian revolution in 2011, when EFE was asked to establish its newest affiliate, EFE-Tunisie. As former Tunisian minister of employment, Said Aidi said at the time, "any number of international organizations are coming to Tunisia with funding and a desire to help….but EFE is the only one talking about creating a *Tunisian* [emphasis added] nonprofit dedicated to youth employment."

With an eye toward creating a "tipping point" for youth employment in the MENA region, EFE has become involved in knowledge sharing to publicize and expedite the adoption of youth employment solutions, as well as to learn new approaches and methods from others. In 2013, the World Economic Forum's Policy Guide to Scaling Social Innovation featured EFE as a case study in social enterprise. It described the innovations that led to EFE's success, including the importance of maintaining a razor-sharp focus on what you do best and the need for buy-in at the local level.[15] The seminal report, "Education for Employment: Realizing Arab Youth Potential," which was prepared in 2011 by the International Finance Corporation and the Islamic Development Bank based on research by McKinsey & Company, profiled EFE as a best practice for work-readiness program within the MENA region and highlights the following conditions for success: having a close relationship with business that provides a good understanding of the private sector's expectations and business needs, flexible education and delivery options, and a guarantee of employment.[16] More important than the kudos for EFE, however, are a growing understanding and recognition of the importance of demand-driven skill-building and the close public-private partnerships needed to scale solutions.

GETTING TO SCALE: EMERGING LESSONS

With locally run affiliates already on the ground before the Arab Spring, EFE has grown exponentially in the past few years. To date, the EFE Network has placed 3,300 youth in jobs, nearly 40 percent of them young women, with job retention at nearly 80 percent. Partnerships with the U.S. Department of State Middle East Partnership Initiative, Manpower Group, Intel, Microsoft, Abraaj Group, Accenture, The MasterCard Foundation, the Drosos Foundation, and more than one thousand employer partners, as well as education providers and local government ministries, have made this possible.

This early success affirmed EFE's approach and set the stage for growth, both in scaling-up in countries where operations were already in place and in expanding to new countries with a large youth population, high unemployment, and a skills gap that could be addressed by EFE's model. EFE pursued, and carefully evaluated, opportunities for both of these growth strategies and had a clear plan in place by 2011, when it created a new locally run affiliate organization in Tunisia, its sixth country of operations, and embarked on a national expansion project in Morocco.

The Morocco expansion project presented a new set of challenges and lessons learned, and it serves as a model for EFE and others in a similar context for scaling-up programs and operations. With support from The MasterCard Foundation, EFE set out to scale-up its operations and programming in the Grand Casablanca area and to introduce programming in five new regions in the country. To reach these greater numbers and get the model to scale, EFE needed to cultivate a broad range of stakeholders and leverage public-private partnerships, including the public education institutions and governments with which it is partnering to achieve systemic change in national education systems.

Over a four-year period, EFE-Maroc, aims to train 15,500 youth: 3,000 unemployed university graduates are currently receiving training in hard and soft skills and then will be linked to a career-building job while 12,500 young people receive training in work readiness skills—such as how to effectively conduct a job search, prepare a CV, and succeed in a job interview—through the *Finding a Job Is a Job* (FJIJ) curriculum provided by EFE partner Manpower Group. For EFE-Maroc, which was established in 2007 and had trained just 560 youth before the national expansion in 2011, this scale-up was monumental.

Built into this national scale-up and expansion project is a more rigorous evaluation by external evaluation firms to provide an independent assessment of the program's (and, by extension, the model's) strengths and weaknesses, and to generate lessons related to relevance, efficiency, effectiveness, impact, and sustainability that will inform implementation and strategy throughout the life of the project and beyond. Equally important to informing EFE program implementation and strategy is informing the broader field on what has been learned and what works in addressing youth employment and economic opportunities. Some evaluation questions to be answered include:

- What are the most essential elements of the model for equipping youth with relevant skills for the workplace and achieving the target employment outcomes?
- Is the profile of youth targeted by the program appropriate and relevant to program objectives? To what extent have the program's methodologies and curricula been integrated into the local education system?
- Has the program effectively incorporated cross-cutting approaches (e.g., partnership, gender, civic engagement)?
- What are the main drivers of cost and to what extent can the program be consid-

ered cost-effective?
- What is the best approach to scale-up the model effectively and efficiently?

To achieve scale, EFE-Maroc is leveraging its partnerships with local governmental institutions, the private sector, and local education institutions. It has been providing training at community centers run by the Ministry of Youth and Sports, as well as integrating soft skills training into the curricula of Hassan II University. EFE-Maroc has worked with Souktel and other technology partners to increase efficiency in effectively delivering all stages of the training program—from recruiting the target population to following up with graduates once they've begun working—and in reaching thousands of youth.

As EFE wrestled with the challenges of a national expansion, it encountered a number of growing pains. Partnerships did not always result in the expected outcomes, for example, and staffing capacity often was in flux. The organization responded by asking board members to redouble their commitment to the work, engaging more deeply with employers, and adjusting student selection criteria and recruitment strategies, which yielded necessary but appropriate modifications in policies and placement rates.

Two years into its national expansion project, EFE and its partners are seeing significant results. Nearly 3,500 youth have successfully completed training, with more than 900 having completed the hard and soft skills employability training. Sixty-eight percent of graduates have been placed in a career-building job within the first six months after completing training. EFE-Maroc has expanded into three of the five planned regions thus far, an experience that has generated a number of lessons, most notably:
- A scale-up and national expansion of this magnitude should be carried out in the context of strong partnerships with local institutions, including government ministries, the private sector, and local community and business leaders.
- The implementing organization must have the capacity—talent, expertise, and resources—and readiness to carry out all aspects of the project.
- Stakeholders must be willing to adapt to current conditions—both internal and external—while maintaining their commitment to the ultimate program objectives.

LOOKING TO THE FUTURE: THE SCALING CHALLENGE

The youth employment crisis in the Middle East and North Africa requires an urgent response. And, in fact, while the MENA region is saddled with the world's highest youth unemployment rates and a very young demographic, the crisis of youth unemployment has now gone global, affecting developed and developing countries alike.

Over the last several years, much has been written about the importance of reorienting economic growth models to be jobs-centered and to have an additional focus on youth employment, since young people are, on average, almost three times as likely as adults to be unemployed.

Institutions including the World Bank, International Labor Organization, UNESCO, and the Organization for Economic Development and Cooperation, as well as Mercer Consulting and McKinsey & Company, have produced cogent reports about the factors contributing to youth unemployment and the policies and practices that will help address the deepening crisis. As the McKinsey "Education to Employment" report reveals, the problem "is not that success is impossible or unknowable—it is that it is scattered and small scale compared with the need."[17] Contributing to and exacerbating this problem is a development model that is still primarily project based and donor driven, instead of being focused on outcomes and impact and driven by indigenous leaders and organizations.

From EFE's own work in Morocco and elsewhere across the MENA region, it is clear that when different sector constituents "step into each other's world," progress accelerates and more young people benefit. But, this approach has to go beyond a specific initiative or project framework. Government actors, private-sector employers, education providers, and civil-sector organizations need to come together to take bold action at the industry, region, and country levels and make commitments for which they are held accountable.

One can envision how to scale-up effective educational supports if the right leaders come together to make serious commitments. The rapid development of online learning approaches and platforms shows great promise to help scale quality training and skills. New simulation-based technologies and serious games are emerging that can help recreate the practical, hands-on learning experience that so many young people lack and that EFE implements in a classroom setting with soft skills training and case study modalities, combined with on-the-job internships. Less clear is how to scale the employer or demand side of the equation in the MENA region. However, similar market-driven experiences in other parts of the world show how this may be possible.

In India, for example, IL&FS Skills, a for-profit venture, operates 18 skills schools and 355 skills centers in 24 states, offering one to three months of instruction in 27 trades, including textiles, welding, and hospitality. It is part of the government-funded National Skill Development Corporation and involves some one thousand partner companies that commit to hiring graduates. Industry partners help to design the training curriculum, which emphasizes learning by doing in simulated workshops. To deliver high-quality, consistent information to large numbers at lower cost, IL&FS uses blended training consisting of technology and in-person faculty components. IL&FS also measures students' performance at least one year after they leave the training.[18] Here we see the major stakeholders—government, private sector, and educational institutions—designing a system that creates clear incentives for youth, together with private-sector commitments and involvement in curriculum design, bolstered by government support.

In the MENA region, EFE has established an organizational and programmatic platform that, with the right resources and partners, is eminently scalable. Doing so will entail developing partnerships with consortia of companies in priority growth sectors (e.g., tourism, hospitality, construction, ICT) and require resources to invest in curriculum development and training capacity, as well as subsidies for those young people without the means to pay for high-quality training linked to jobs. EFE is certainly ready to meet the challenge and to work with others who share the same objectives. Although the overall challenge is daunting, every day brings a new reminder of how transformative a first job and a new lease on life can be. In the words of a graduate from EFE's Jordanian affiliate JCEF, "Taking the JCEF course—it was a milestone for me, in my life, it changed everything for me. It gave me an opportunity to get a good career, a good payment, a good salary, a good opportunity to support my family, myself. I helped my two brothers and one sister graduate college."

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Ann Cotton

Who Teaches Us Most About Financial Programing in Africa?

"I have never held more than the money for a box of matches in my hand." These words, softly spoken by an 18-year-old Zimbabwean woman, describe the absence of money in her life, aside from its role in creating conflict and anxiety at home. She spoke at a Camfed workshop held for young rural women who had just graduated from secondary school to help them seek solutions to the lack of productive livelihoods open to them in their rural area. Her words were her starting point, and they needed to be ours.

Camfed is an organization founded in 1993 and dedicated to the advancement of rural areas of sub-Saharan Africa by investing chiefly in the education of girls and the strategies that grow their leadership and status.

Young educated women living in poor communities are Camfed's teachers. They are members of a vast group whose potential to transform their own lives—and those of their families, communities, and nations—is limitless. Programs that are built on listening to and learning from such women have the best chance of achieving progress. This paper describes Camfed's journey of investment in designing, implementing, and measuring programs to achieve the financial inclusion, with all its attendant benefits, of young rural women in five countries of sub-Saharan Africa.

In 1999, Lucy Lake[1] and I, along with the first four hundred secondary school graduates of Camfed's program in Zimbabwe, launched Cama (the Camfed Association). It was designed as a rural membership organization and support network to extend into young adulthood the friendships these women had made during their secondary school education. At the program launch in Harare, young women graduates from all participating districts came together and recognized, for the first time, that they were a national presence. Over three days, the members designed their organizational structure, including the process for selecting officers. They elected the first Cama chairperson, Angeline Murimirwa, who is now executive director of Camfed Zimbabwe and Camfed Malawi. The members decided that Cama would be an organization of young women united by a background of rural poverty and a commitment to improving lives in their communities. Today,

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Cama has 19,550 members across Zimbabwe, Zambia, Ghana, and Tanzania and will launch in Malawi in September this year. It is a unique and powerful movement for social change.

Let's briefly remind ourselves of the imperative for finding solutions for young rural women. The 2012 Education for All Global Monitoring Report published by UNESCO points out that, in 2030, "there will be three and a half times as many young people in sub-Saharan Africa as there were in 1980." This stark prediction underpins an urgent call to invest in African youth and their development of skills. Moreover, the crisis is already upon us: globally, young men and women are bearing a disproportionate amount of the pain resulting from the 2008 financial crisis. Lack of work is an endemic problem that predates the financial crisis in the context in which Camfed works, where young rural women have the fewest employment opportunities on leaving school.

The young woman whose words informed Camfed's search for solutions was participating in a workshop with 24 other secondary school graduates. All the participants were from poor rural homes, and Camfed had supported them, financially and socially, throughout their secondary schooling. We had recognized the dearth of safe livelihood options they faced as they made the transition from girlhood to adulthood, and we were seeking ways to support their aspirations. The young woman's courageous articulation of the extent of her poverty opened a dialogue at that workshop in which every participant spoke of a level of poverty that made each acutely vulnerable to exploitation of every kind.

The combined impact of sex and gender compounded this vulnerability. The young women had inherited a sense of familial responsibility from their mothers and were deeply aware of family insecurity; early marriage and paid sex were the most readily available ways of securing cash, yet also the most personally traumatic and dangerous. The data on HIV/AIDs reflected that reality, as incidence had risen exponentially among young women in sub-Saharan Africa. The migration of young women from villages to towns and cities further undermined their security and well-being. Domestic jobs in homes and hotels often involved sexual coercion and abuse, but the women's focus on their families meant that they stayed in damaging employment situations in order to send home regular remittances. A chief in the north of Ghana said to me in 1999, "Girls are returning with child or with death."

At Camfed, we had planned to introduce microfinance to school graduates by working with specialists in this field. However, after extensive discussions, we understood more fully that the microloan providers focused on borrowers who had established a fledgling business and saw a potential for growth. Young women graduates in rural areas were starting from scratch, so how could they enter a loan relationship when they had no experience of owning, protecting, managing, or spending money? A loan was equated with debt, and debt carried a power imbalance that these young women could not see as beneficial. Something new was called for, so we established a program that was precisely designed to meet the needs of young women who were anxious about their future and about embarking on unfamiliar pathways. The childhood imprints of poverty, poor health, bereavement, and unpredictability were uppermost in their lives; we recognized that technical details would be irrelevant and invalid unless the program's design addressed, first and foremost, the psychological barriers.

THE SEED MONEY PROGRAM

The Seed Money Program (SMP) resulted from our consultation with young women. It was launched in Zimbabwe in 1999 and later introduced in Ghana, Zambia, and Tanzania. To date, the program has enabled 8,362 young women in these four countries to set up their own businesses. It is being introduced in Malawi in 2013. The design, which has remained broadly consistent, is based on the following premises:

- That a school graduate with negligible money experience does not have the understanding or confidence to enable her to take on a loan
- That safe livelihoods should be created in rural environments to enable young women to help build the rural economy
- That the friendship network these women established at school can foster business relationships in rural areas
- That the experiences of the client group as they establish and grow their businesses will be of huge value to later groups of school graduates, whom they reach through volunteer mentoring

The SMP operates in areas where there are no financial services. Businesses run on cash transactions, and the protection of accumulated cash is imperative. One of the early lessons (borne out through subsequent years) was the distinction between financial exclusion and financial literacy; the fact that the young women had no money and had negligible experience using it did not mean they lacked an understanding of money. Financial intelligence among this client group was considerable, precisely because their poverty demanded that they achieve the highest level of security possible with the little cash available to the family. For example, the cost of goods and services the family requires was known to the last cent, including seasonal variations. The earnings of a family member living away from home were understood as a family asset that can be relied on for emergencies. However, negativity frames this financial literacy: far from being a neutral commodity offering choice and opportunity, money carries negative emotional baggage. Above all, years of living in poverty and witnessing parental stress around money means that each client's relationship with money is suffused with anxiety and fear. The journey each woman took with the SMP had to be experiential and to include psychological and behavioral learning, as well as teaching financial and business skills.

The program grew over the next decade and was offered to every girl who benefited from Camfed's secondary school program. The social system around each woman provided peer mentoring that enhanced her formal training. In the early years, Camfed provided each participant with a cash transfer of $10 to $15—in the form of a grant, not a loan (the amount now has a ceiling of $100). The women had

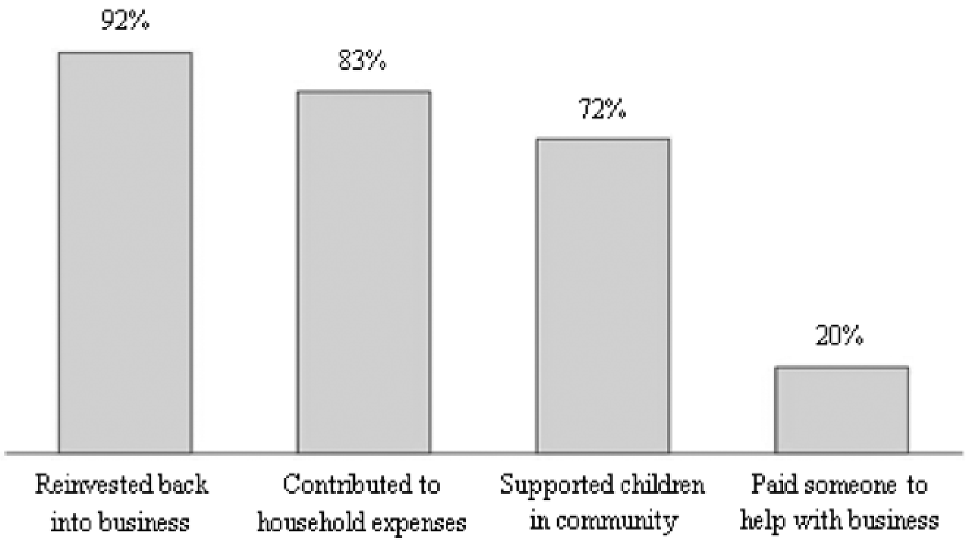

Figure 1. Spending Choices of SMP Participants Surveyed, 2012. And include footnote: The Gender, Violence and Health Centre at the London School of Hygiene and Tropical Medicine.

to apply for the grant by explaining their plans for its use, and they were required to report back on how they spent the money. It was essentially an extension of their education into the realm of finance; the grant gave the young women their first experience of controlling the spending of money. The program's departure from traditional microcredit, especially using cash transfers, made it a challenge to convince donors of its efficacy in creating livelihoods for this socioeconomic group. We needed to reduce the risk for donors by commissioning an in-depth research study to assess SMP's outcomes and costs in order to expand this opportunity for young women.

In 2012, the Gender, Violence and Health Centre at the London School of Hygiene and Tropical Medicine embarked on the study. Zimbabwe and Tanzania were the research sites selected because they would provide insights into a mature program (Zimbabwe) and a more recently established program (Tanzania).[2] This paper shares the lessons learned in Zimbabwe because of the program's longevity there.

It is important to note the historical context in which the young women surveyed operated their businesses. Throughout 2008 and 2009, Zimbabwe experienced an unprecedented economic crisis. Hyperinflation reached 231 million percent, eradicating profits literally hour by hour and eliminating the ability to replenish stock through conventional purchases. Transport and other infrastructure systems broke down nationwide, making goods difficult to obtain, and customer demand evaporated with the wildfire spread of poverty.

In the face of this crisis, 45 percent of the SMP clients surveyed maintained their operations. For many, bartering was the primary means of conducting business, with both sales and buying new stock. Some acquired additional capital from family members and some purchased stock from neighboring countries. Among survey respondents who had joined the program before or during the economic crisis, 95 percent reported that the program had helped them deal with it.

These findings were consistent with numerous other studies in showing that women spend their earnings on household essentials, including food, clothing, other child-related expenses, and medical bills. Figure 1 shows the breakdown of results by types of spending choices among those surveyed.

An unexpected finding of the survey was the extent to which SMP participants contributed their profits to vulnerable members of their community, including orphans and the elderly. As Figure 1 shows, just over 72 percent of respondents reported spending money to support children in the community or for other community-related purposes. The survey revealed that most study participants engaged even more widely in social philanthropy. At least 65 percent of SMP participants reported giving in three major ways: providing support (defined as advice, training, or donations) to other community members; providing support (as previously defined) to other SMP participants; and sitting on Cama committees. Mentoring *of* SMP participants was found to be associated in a statistically significant way with mentoring *by* SMP recipients. Women in the study expressed a desire to help others, even though this was not always possible.

SMP was providing young women in rural areas with a bridge from school to livelihood. The number of clients and the support structures around them were an important contribution to individual, family, and community survival. However, the broader economy of the participating rural areas remained largely at subsistence level; "better subsistence" was far short of Camfed's goal and would never create sustainable prosperity. We wanted to promote the development of a more diversified economy with a variety of jobs and opportunities.

Against this background, we introduced a program in 2008 that was designed to enable 450 young women from rural areas of Zambia to train as business and social entrepreneurs. It was introduced and funded as part of the Goldman Sachs 10,000 Women Initiative. Camfed led a consortium of partners: the Zambia Ministry of Education, the International Labour Organization, Cambridge International Examinations, the Skoll Foundation, the University of Cambridge Judge Business School, and Aptivate.

The rural location was chosen because it provided a microcosm of poverty and environmental challenges that could form the framework of the training for the creation of new business and social enterprises. Samfya, on the shores of Lake Bangweulu, had a mono-economy, based as it was on the single commodity of fish. The heavy dependence on fish for livelihoods, along with poor resource management, had resulted in depleted stocks and a shrinking legal fishing season. Poverty-related problems, including low literacy among adults, stunted growth of children, maternal mortality, and large families, were compounded by high rates of HIV/AIDS.

We had built a strong network of local partners and institutions over eight years, including traditional and education leaders, but establishing the course in a rural area posed significant logistical challenges: we hosted more than two hundred people over several three-week periods in a rural school with no electricity. A lorry carrying 80 live chickens and boxes of vegetables meant to feed our group got stuck in the rainy-season mud. A generator, mattresses, and bedding were imported from Lusaka. A baby was born. Nevertheless, we remained steadfastly convinced of the educational value of the rural location. Moreover, money that would have gone into paying urban hotels was invested in improving the infrastructure of a rural school; we left it far better resourced, which was a sustainable gain.

Participants were identified through Camfed's network of partner schools, based on their academic achievements and emerging leadership qualities. All candidates were, without exception, from extremely disadvantaged backgrounds and were supported by Camfed throughout their secondary education.

The most significant benefit of locating the course in a rural area was in demonstrating that the rural environment offered an array of business employment opportunities that were related to problems so familiar to the young women that they assumed they were an inevitable part of the social fabric. Existing Cama members took on roles as trainers, thus building capacity within the Cama network to deliver programs to its constituency of young women and giving more experienced Cama members the opportunity to reinvest their own skills and experience by supporting new school graduates. Professional trainers, accredited by the International Labour Organization, supported Cama trainers and provided the over-arching framework for learning, as well as ongoing mentoring. Additionally, social entrepreneurs were invited to create special studies in their various fields: Joe Madiath, founder of Gram Vikas, led an analysis of local sanitation and how it could evolve as a low-cost, community initiative; Anna Oursler of Global Footprint Network led the measuring and analysis of fish stocks in Lake Bangweulu; and I led a demographic survey of the population of Samfya in terms of years of education. Other social entrepreneur partners included KickStart International, International Development Enterprises India, and Barefoot College. Each of the guest entrepreneurs was a member of the Skoll Foundation Fellows' Program. Sally Osberg, the Skoll Foundation president and CEO, came to Samfya to support and witness social entrepreneurial principles being taught and implemented. A full length documentary, *The Entrepreneurs*, captured the program.

Experiential learning enabled the young women to develop social confidence. They discussed how to get community members to cooperate with their surveys, and analyzed strategies for building consensus and ways to share their findings with a predominantly illiterate community. Above all, they approached the community with new respect and recognized that learning was taking place all around them, which was an important advance on their previous thinking that an urban environment provided the best opportunities for establishing new enterprises.

Leadership training took place alongside training in core business skills, including market research, advertising, securing and managing finance, and information and communications. The course was accredited by Cambridge International Examinations, which made a significant in-kind contribution to the development of training materials, making multiple visits to Zambia to assess and refine the course. The young women played the most significant role in shaping the program to meet their needs. They were behind its evolution from year to year, including increasing content on reproductive health in recognition of the close relationship between young women's economic and health status and the imperative for them to be addressed in tandem.

The Samfya context provided significant learning opportunities, particularly experiential ones. It did not provide a wide range of businesses, social enterprises, and employment opportunities; indeed, this lack was a raison d'être for the course itself, which was aiming to catalyze a more diverse economy. Research for Camfed, conducted by the Said Business School at Oxford University in the Samfya and Mpika districts in 2009, revealed that 90 percent of 128 businesses sampled were engaged in just six business activities: selling fish, selling groceries, selling second-hand clothes, selling poultry, farming, and baking. A number of businesses not represented in Samfya were introduced to the students, including information and communications technology, solar energy, photography, and food processing. Business cases were developed as part of the training, including market opportunity and projected profits. Nevertheless, at the end of the three years, despite the 70 new businesses established and 40 existing businesses supported for growth, there was only limited and anxious interest in any business ideas that were unfamiliar in Samfya.

We commissioned a field study in three rural districts of Zambia—Chinsali, Isoka, and Mpika—each of which had representatives from the 10,000 Women Initiative.[3] We needed to know, in some depth, why most graduates of the program opted to start businesses that were familiar, thereby competing with existing businesses, imposing time and travel demands, and offering low profit margins. During training, a range of new business ideas appropriate for rural contexts had been presented and examined, but we learned that the group did not recall the new business ideas very well. This suggested that new ideas required more investment in learning, including experiential learning, which was a significant challenge precisely because the businesses were largely absent from the participants' context.

The reasons they gave for not pursuing the new ideas fell into five broad categories:

- Fear
- Not wanting to compete with their peers (i.e. young women in the Cama network)
- Sexist stereotypes
- Lack of technical knowhow
- Inadequate startup capital for some businesses

Who Is She?

Lindiwe (not her real name) is 19 years old. She lives in a village of around three hundred people in the district of Chinsali in Zambia. Her father is the head of her household, although his ill health means that he cannot work and contribute to the family's income. Lindiwe is the fourth born of five children. Her mother died when she was nine years old and at primary school. The death was sudden; Lindiwe returned from school to find the neighbors gathered and crying. Her father had a small-holding on which all the children worked seasonally during school holidays, and at weekends. Her oldest brother worked as a factory porter and sent money home. Her two older sisters married young after completing only a primary school education. Both had subsequently died, and the two orphaned children of one sister had come to live at Lindiwe's home. Lindiwe was the only family member who had completed a secondary school education and she aspired to become a nurse.

Lindiwe's father needed to travel the 100 mile round trip to the clinic monthly for health monitoring and drugs. She traveled with him, covering the cost, as well as the cost of a diet that countered the toxicity of his treatment. The two orphaned nieces were at the local primary school and needed clothing and school supplies. The other major family expense of Lindiwe's five-person household was the cost of her younger brother's secondary school education.

Lindiwe carried all the financial responsibilities of the household.

Her financial intelligence was high; she understood fully the complexity of the family budget and had internalized the competing costs, including when they fell. Against these costs she set the family's income from the small-holding, her brother's income from "piece-work" on their neighbor's land, and her own small business income from a second-hand clothing stall.

The family necessities held Lindiwe in a budgeting straitjacket; there was no room to maneuver and no safety net. It was simply a day-by-day risk management system.

Fear was the overarching reason, and it dominated their decision-making. Fear was the result of the relentless psychological pressure the young women faced and the inner turmoil they needed to manage in order to secure their families' well-being. The extent of their poverty drove a need for immediate solutions.

During the study, the word *risk* proved hard to interpret in the local language and was understood and articulated by the participants through a mixture of fears, challenges, and barriers. The discussion nevertheless illustrated the breadth of the issues they considered as they selected a business idea in the rural context. Issues included:

- High transport costs
- Damage to goods in transport
- Lack of storage facilities for perishable items

- How to deal with competitors that had developed more sophisticated measuring and packing techniques
- Livestock disease

These inherent risks created barriers to entrepreneurship among this group. The risks were beyond their control and put the business ideas beyond their reach, as the young women maintained the fragile balance between incoming resources and necessities. Within this context, a low-risk business delivering low profits immediately would always trump a move into a higher-risk business offering far greater profits but with a longer payback period, unless the risk could be mitigated through a business training program with a new financing model.

The women showed a high level of empathy with their peers, something that was apparent throughout the three-year training of 434 young women. Their inclination was to help and support each other, so the concept of competing with each other for market share in a *new* business was a significant barrier. However, the *existing* marketplace, which was highly competitive across a narrow range of businesses, such as hairdressing, selling second-hand clothes, and food stalls, was seen as an acceptable environment in which to compete. The result was an undiversified business environment in which innovation took place in a small range of enterprises. Goods and services that were not available within the rural environment continued to be purchased in town, thus depleting the rural economy.

CASE STUDY: THE MPIKA PRESCHOOL

The 10,000 Women Initiative encouraged both social and business enterprises. The participants were already fully engaged as community activists, giving their time to support particularly vulnerable members of their communities. They spoke at schools, for example, encouraging pupils to study and succeed. They cleaned the homes of women in the advanced stages of HIV/AIDS. They counseled bereaved children. However, they saw this behavior as a natural response to human suffering. The idea that a social service could be monetized and profitable was anathema to them; they felt it would immediately negate the moral value of the service.

A preschool for poor children emerged from the initiative. The need was evident from the number of small children who roamed and played together, in ragged clothes with distended stomachs, and no apparent adult supervision or stimulus beyond their interaction with each other. The death of a small child in a traffic accident galvanized a group of five young women to act. They found government training courses for preschool teachers, and two women enrolled, with transport costs met by Camfed. The five women conducted market research among families, including the many in the community led by grandmothers, and found a strong demand for the preschool they envisaged. But how could they provide a sustainable service for the children of families unable to pay for it? A grant from Camfed funded the startup costs, and the women planned to offer both paid and free places, the one subsidizing the other.

Their unswerving dedication to the idea gained them allies. The local town council provided a venue at no cost. Community members began to donate materials, local carpenters made tables and chairs. The group's commitment was almost exclusively service driven; business considerations were there purely because the service had to be set up and sustained. The business plan included stipends for each member of the group. They planned to work a weekly shift system and get paid only for the hours spent in the classroom. The preschool opened with great community fanfare. Children enrolled and attended consistently, and demand quickly outstripped supply. The sight of children gathered outside or at the windows, watching the proceedings and imitating the songs and counting where they could, disturbed the preschool leaders. They expanded enrollment to absolute capacity and ran two sessions a day for 30 children at each session.

At the two-month review of their accounts, Camfed's financial manager, who was playing a financial teaching role for this group, realized that the staff members had not paid themselves. They had made a profit, but this profit was used to provide a snack for all children, every day. Many of the children's needs were acute, and this drove the young women's decisions. Such compassion and kindness threatened to put them out of business; their personal circumstances would not allow them to offer such a high level of service over the long term. Emotional factors, and the financial and business behaviors that emerged from them, had to be considered together. The deep empathy the preschool leaders felt for the children was born of their own experience in families suffering high levels of poverty. Their decisions tended to be visceral rather than objective and analytical, and they undermined sustainability. Nevertheless, this empathy made the women exceptional leaders and the children's day-to-day lives were transformed, as were their chances of making a successful transition into primary school.

The development of the business model recognized and adapted to the leaders' emotional and environmental context; four years on, the preschool is thriving. It relies on the fees of the better-off families and on community and international philanthropy. The leaders recognized that the preschool could only grow if they had the time and energy to devote to it, so they decided to take their stipends so they could continue to serve the children who remain the women's paramount consideration.

Through SMP and the 10,000 Women Initiative, Camfed was learning how to support young women during the transition from school to young adulthood, employment, and higher education. We came to understand the skills they needed, as well as the behavioral and emotional journey that would enable them to take full advantage of opportunities and to help create a more vibrant economy. This led us to work with young women to create two new programs: a financial literacy training program for young people before they leave school, and an advanced program for young women who have proven their entrepreneurial talents and passion and have the potential to grow businesses that could create employment and wealth. We recognized that the growing number of young businesswomen was creating an environment that those still in school aspired to emulate. The young entrepreneurs were powerful role models who were challenging gendered norms by generating, controlling, and managing money, and they therefore had the potential to be strong teachers with valuable experience in financial literacy.

Data gathering and analysis provided strong evidence of the efficacy of the existing programs, but we knew that the program had to evolve further to achieve wealth and employment by creating businesses in the rural context. The UK Department for International Development supported a Financial Education Program, while The MasterCard Foundation increased its support beyond girls' secondary and tertiary education to fund a new business program, the Innovation Bursary Program.

THE INNOVATION BURSARY PROGRAM

At its inception, the Innovation Bursary Program (IBP) was designed to introduce new knowledge and business ideas to individuals who had a good standard of academic performance (though were not necessarily academic highfliers), and who had personality traits that pointed to an ability to innovate and lead, such as confidence, curiosity, and strong communications skills. To date, 30 young women have completed the IBP, and 28 more have been selected for the third cohort.

The program was envisaged as a development prototype with the potential to accelerate systemic change in rural Africa. The design has been fine-tuned over the last two years, but the fundamentals have proven resilient and remained constant, relying on these mutually reinforcing initiatives:

- The provision of technical skill-building and exposure to new business practices and ideas through group and individually tailored training, internships, and mentoring
- Assistance in brokering relationships between young women entrepreneurs and microfinance institutions
- Training and the development of market research to test the viability of business ideas in the rural economy
- Peer support among a year group and between successive year groups
- Engagement and oversight of Camfed directors in-country and internationally

Two years of action and analysis have provided some important insights. First, we have refined the criteria for the selection of candidates to give equal weight to their personal achievements and qualities on the one hand, and to their commitment to their business idea on the other. The second generation of participants seems to be even more determined and outward-looking than its predecessors. Second, the selection of internships evolved because by the second year more businesses were interested in participating. At that point, compatibility between the IBP participant and the business was assessed at sessions in which businesses pitched their opportunity, thus tipping the balance of choice in favor of the participant. Third, the mentors are proving invaluable; their engagement goes well beyond the anticipated time commitment and is sustained by the readiness of mentees to listen, learn, and act on advice. Fourth, family support is increasingly important. When family members provide moral, financial, and other types of encouragement, participants are more likely to persevere; therefore, the second group's orientation included a day for family members such as parents and husbands to attend.

THE CONCEPT OF SOCIAL ENTERPRISE IN THE INNOVATION BURSARY PROGRAM

From the outset, the IBP has been more than a simple enterprise development initiative. Camfed's and Cama's principles of giving back underpin the ethos of the program and have been woven into it. We are now clear that an enterprise's likelihood of being sustainable is a fundamental criterion for inclusion in the program. When a business idea seemed viable and a candidate committed but the social purpose was not self-evident, Camfed helped the entrepreneurs build a social purpose into the business design. For instance, a food-processing business became a mechanism for informing consumers about child nutrition – and contributing to it. An enterprise aimed at growing different types of crops became an opportunity for collective bargaining with other farmers to get fairer prices for raw materials. Creating jewelry offered an opportunity to use recycled materials (glass) and renewable resources (bamboo). Producing children's clothing created an opportunity to diversify into making other children's products, such as school bags, out of recycled plastics.

The first two cohorts of entrepreneurs have articulated a number of ways their businesses can give back to their communities. Much of this can be attributed to the ethos underlying their membership in Cama, and the difficult childhoods several of the entrepreneurs have endured emerged as a driving force behind their social ideals. As one participant said about her intention to give back once her business was established:

> I want to take care of my family so it will not go through what I went through. I want to train the youth in the community through mentorship to be able to also do my type of business for a living, and take care of some of the needy but brilliant kids so they can go to school.

CONCLUSION

Over 15 years, Camfed's financial inclusion programs have emerged and evolved as an ongoing collaboration with the young women who are our clients. The lessons our collaborators have taught us through their words, their actions, and their measurable successes are numerous. Here are some that have proven extremely powerful, if less obvious:

- Financial inclusion programs work best if they offer a continuum of education and appropriate supports that are available at critical points in a young woman's life, from secondary school education through her post-school transition.
- Creating an ecosystem of support and inspiration through role modeling, peer mentoring, and local mentorship creates a systemic and sustainable impact

across time and distance.

- Barriers to change and the adoption of new financial and business practices are as deeply rooted in the social and emotional dimensions of a young woman's realities as they are in the constraints imposed by her physical and geographical setting.
- The deep-seated empathy of many young women helps them to see needs and transform solutions into social enterprises. To create enduring businesses, the inclination to serve must be balanced with decisionmaking and coaching in business skills.

Will these young rural African women and their children have a future that offers increasing economic security and equality? By bolstering the drive and talent of these young women with programs designed around their ideas and experience, they will.

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1. Lucy Lake joined Camfed in 1993 and is now the CEO.
2. A quantitative cross-sectional survey was conducted in two districts of Zimbabwe and involved a total of 132 current and former participants of the SMP. Fourteen subjects participated in qualitative in-depth interviews. In Tanzania, in-depth interviews were conducted with 10 subjects in two districts. For the costing analysis, a retrospective financial record review was carried out in conjunction with a country-level review of activities related to the program.
3. The choice of the lead researcher was significant. Dr Lungowe Matakala was a young Zambian woman who had spent a considerable amount of time in the rural areas studying the nexus between traditional and nationally legislated land rights for women. She spoke indigenous languages and understood the context of these young women's lives. Her academic excellence in the Zambian system led her to earn a PhD at Cambridge University.

Jamie M. Zimmerman and Julia Arnold

Hope or Hype? Five Obstacles to Mobile Money Innovations for Youth Financial Services

Seen as a critical enabler of young people's economic empowerment, youth financial inclusion has galvanized support and activity all over the world, garnering attention from policymakers, the financial sector, practitioners, and researchers. At the same time, technology, particularly the mobile phone, is increasingly seen as a potential tool to bridge gaps in information, products, and services to poor people worldwide. Services like M-PESA in Kenya have sparked interest and attention around the mobile phone's potential to accelerate the pace toward global financial inclusion. As a result, there is growing consensus that mobile solutions are an important, effective development strategy.

Mobile-enabled solutions to financial access and capability bring hope to those working in youth financial inclusion at a time when existing tools are proving less effective and sustainable than envisioned. Classroom-based financial education has not catalyzed changes in behavior effectively, nor have we yet found a way to make youth financial services sustainable.[1] Inspired by many of the mobile financial service successes for adults, including mobile wallets, mobile payments, and account access for deposits and withdrawals, the youth financial inclusion field sees a way forward. Theoretically, mobile solutions should allow the field to leapfrog many existing hurdles to financial access and experiment with delivery

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This article summarizes findings also presented in the 2013 Global Assets Project policy brief, "Accelerating Access: The Movement Toward Mobile Solutions to Youth Financial Inclusion" by Zimmerman et al., published by the New America Foundation.

channels, marketing, behavioral nudges, and other financial capability-enhancing activities.

Applying mobile solutions to goals for youth financial access has particular appeal, as young people are known to be early adopters of and innovators with new technology. Experience has shown that children and youth do not even need fomal training to be able to pick up and use a mobile phone.[2] By building on this ease with technology, access to financial services early in their lives may maximize the positive economic, social, and behavioral impact on youth.[3] Accumulating assets early can help mitigate the vulnerability and volatility that define the lives of low-income individuals and households. In fact, youth may even influence older household and community members by demonstrating the benefits of formal financial services.

If youth (a) generally have access to mobile phones, (b) are early adopters and fast learners of new technology, and (c) develop their stickiest behaviors (i.e., those most resistant to change) early in life, then mobile solutions should be an accelerator of financial capability and access among the youth demographic, even more so than for their adult counterparts.

Promise and excitement aside, however, we are still a long way from proving the accelerator hypothesis. There is a dearth of evidence on how low-income youth use mobile phones, on whether they have regular access to them, and if mobile-enabled financial services and information will be as accessible to youth as they seem to be for adults. To be sure, the youth financial services field is only beginning to understand how youth earn and manage money and, by extension, to understand whether and to what extent the mobile phone can effectively provide access to formal financial services. By synthesizing the current opportunities and obstacles to using mobile-based tools to advance youth financial access and by assessing current opinion among practitioners, this paper examines whether mobile solutions offer the youth financial inclusion field immense hope, or just hype.

THE PROMISE OF MOBILE AND YOUTH

The Context

A vast majority of the world's 1.5 billion youth live in poor countries, with nearly 1.3 billion living in developing countries and one in five living on less than $1 a day.[4] Low-income youth tend to start working earlier, get married and have children earlier, and engage in complex financial transactions early in life. Out-of-school youth are overrepresented among the unemployed and underemployed, even where unemployment rates are not high.[5] As youth face major life transitions without adequate education, with low employment, and increasing responsibilities, financial services (especially safe, reliable savings services) can play an important role in how well they will adjust throughout their lives. We know that youth in and out of school save money, typically in small amounts.[6] Yet, of 800 million youth living on less than $2 a day, only about 4.2 million have access to financial services, and thus little formal means of managing their resources or saving for their future.[7]

Research shows that youth across the developing world want flexible, accessible savings services with transparent, and preferably low, fees.[8] What money youth do earn—from allowances, gifts, or work—tends to be saved through informal means, either hidden in piggy banks or given to their parents for safe-keeping. Much like the informal saving mechanisms used by their parents or other adults in their communities, these methods are neither safe nor reliable. While youth on the whole have many misperceptions about formal financial services and institutions that reduce their propensity to use formal accounts, providing them with access to a safe, private place to store their savings is fundamental in helping them build and gain access to their assets.[9]

The Promise

Mobile-based financial services, typically referred to as mobile money, may give underserved low-income people access to financial tools that offer flexibility and privacy at low cost. With over five billion subscribers in developing countries, the mobile phone has created a network through which many people, particularly those in rural areas, now have access to vital information and services.[10] For youth, this holds particular promise. Limited mobility plays a defining role for most youth throughout the developing world, especially girls. Mobile phones could offer youth, especially rural youth, the opportunity to leapfrog physical mobility constraints and the power relations within which these are bound.[11] Youth are severely time-constrained (especially those still in school); they have small, sporadic incomes; and they place high priority on finding a private place to keep their savings. Mobile financial services could help to ensure that youth customers avoid the often expensive and time-consuming journey to a bank branch while offering them the privacy of transacting without an adult present.

Mobile solutions could also enhance youth financial capability, which requires access to appropriate financial services combined with the ability, knowledge, skills, attitudes, and behaviors to make sound personal financial decisions.[12] Mobile-based nudges such as educational messages, reminders, or alerts sent via Short Message Service (SMS), offer a convenient and expedient way to get important information to youth and possibly influence their behavior. Having access to this information early on may help youth develop sound financial behavior that can be carried through the rest of their lives. Whereas financial education can implant tools and knowledge, SMS reminders and alerts can prompt behavioral changes that ultimately help youth plan and meet their future goals.

The Evidence

We use the United Nations definition of youth (age 15 to 24), but not everyone studying this demographic does, which makes analysis difficult. This variation also confirms that youth are not a homogeneous group, nor is youth simply an age; it is a life stage, one full of transitions and new experiences. Youth are as varied as adults, and thus understanding their needs, from skills training to mobile phone access, can be complex.

Evidence on whether and how youth use mobile phones is sparse and often contradictory. Research conducted by the GSMA mYouth initiative found that, of the 4,500 children age 8 to 18 who were surveyed in Egypt, Chile, India, Indonesia, and Japan, 65 percent had access to a mobile phone and, among those who owned a phone, 81 percent had a new handset.[13] There were regional and age differences as to when youth first owned a phone and how they used it; for instance, younger children tended to use their mobile phone to make calls while older youth sent SMSs.

GSMA profiled countries with high mobile phone penetration rates, but these are not representative of the developing world, much less of the low-income youth living in it. Another study of almost 3,000 youth age 9 to 18 in three African countries (South Africa, Ghana, and Malawi) found that a majority of youth there do not own phones. In fact, mobile phones per household varied widely, with 77.2 percent of households in South Africa, 29.6 percent of households in Ghana, and only 23.3 percent of households in Malawi having a mobile phone. A significant portion of youth claimed to not even use a phone (60.2 percent of youth in Ghana and 76.9 percent in Malawi), which indicates that gaining access to mobile phones is a challenge for these youth.[14]

Gender plays a role in mobile phone access as well. While 70 percent of parents on average in the GSMA study cited concerns about their children's use of mobile phones, these concerns decreased as their children got older but, notably, they decreased more significantly for boys than girls. Parental control over children's use of and access to mobile phones is important, especially for girls. Girls in Ghana reported having very little access to household phones and a fear of punishment if they did use them.[15] Interestingly, this varied significantly by country: girls in South Africa had more use of mobile phones than boys, while girls in Malawi and rural Ghana had less use of them than boys; this pattern suggests that, as mobile phone use becomes more widespread, girls may begin to reap the benefits in greater numbers.

A study of 1,198 15- to 24-year-old youth in Kenya and Ghana examined youth access to financial services and mobile phones.[16] In general, the study found that youth with a bank account were more likely to seek information on financial topics and use financial services than those without a bank account. In Kenya, for instance, 75.5 percent of mobile money users between the ages of 15 and 19 have bank accounts. This ratio shifts as the population gets older and is reversed in the 25- to 44-year-old range: 57 percent of the unbanked in this age range use mobile money but 42 percent of the banked do. Significantly, among low-income youth, only 16 percent of 15- to 19-year-olds and 15 percent of 20- to 24-year-olds use or have access to mobile money. When asked about their savings habits, almost 25 percent of Kenyan youth age 20 to 24 who have used M-PESA also use their accounts as informal savings mechanisms. Only 7 percent of youth age 15 to 19 reported doing so, but this may be because M-PESA requires users to be at least 18 years old. In Ghana, there was very little recognition of mobile money services: 75 percent of all respondents said they had not seen any information on the topic. However, more than three-fourths of both urban and rural youth reportedly use mobile phones, so there is potential to expand banking by phone as more services are provided.

It seems that while global enthusiasm is strong for the use of mobile technology to facilitate youth financial inclusion, there is still a lot we don't know about the extent to which mobile phones are prevalent among low-income youth in developing countries. Indeed, we are only beginning to understand the financial lives and needs of low-income youth, let alone how mobile phones can help meet those needs.

CURRENT STATE OF THE FIELD

Perspectives

The dearth of data on mobile-based youth financial tools has not stifled enthusiasm for them. To further understand how the youth financial services field perceives mobile technology's potential for youth financial inclusion, New America Foundation, in partnership with Making Cents International, conducted a survey in May 2013 of one hundred professionals with expertise in youth financial services and capabilities, and mobile phones. The survey allowed us to test these theories by asking some key questions of experts and colleagues about their experience working toward youth financial inclusion. In addition to this survey, we conducted follow-up interviews with individuals who helped us get a deeper look into some of the survey results.

The survey primarily investigated three questions:

- Which tools are currently being used in the field?
- Which tools hold the most and least promise for the future?
- What are the biggest and smallest obstacles to mobile youth financial services?

We found little consensus among respondents for all three of these questions. Respondents came from diverse backgrounds and worked all over the developing world. They had a wide variety of experience with mobile tools, including SMS, mobile money, branchless banking, and data collection.

The respondents were evenly divided on how they believe low-income youth use mobile phones: for everything, only for things like calls or texts, or rarely due to limited access; each answer got nearly one-third of all responses. When the questions are analyzed by the region in which the respondents work, the picture remains mixed, which is somewhat surprising. When asked whether youth should be considered a segment separate from adults, over half of respondents said yes; one-fourth said it depended on the tool. When considering these two questions together, it becomes clear that it is difficult to place all youth in one box. They are not homogeneous, and it is likely that how youth use mobile phones depends on a variety of factors, demographic, social, and others. It may even be that the older youth are more similar to adults than to younger youth, but the nature of the survey did not allow for this kind of nuanced answer.

The most interesting finding from the survey illuminated a gap between which mobile tools currently offer the greatest opportunity and which tools respondents think will offer the greatest opportunity in the future. Across region and profession, tools seen to offer the greatest current opportunity varied; SMS and mobile money were seen as equally good opportunities across regions, and SMS and data collection were seen as great opportunities across professions. When asked to select which tools have the greatest opportunity in the future, regardless of region or profession, everyone converged on mobile money. Even when examining results by the tools with which the respondent had actual experience, there is no tool loyalty; mobile money is seen as holding the greatest promise for the future. These results expose a gap between which tools are currently at our disposal and which tools we *think* we'll have access to, and that our clients will want and use, in the future. The wide gulf between present and future thinking exists either because mobile money is assumed to be the tool of the future and youth thus will automatically use it, or because we simply don't know what the future holds.

Finally, when asked which issues pose the greatest obstacle to using technology to achieve youth financial inclusion/capabilities, there is again no clear consensus among respondents. Policy and regulations, bank account ownership or access, know-your-customer requirements, lack of data, and sustainability were all selected by most people as significant obstacles, but none of them is an outlier. Interestingly, none of these obstacles is specific to available technology; most are the obstacles that must be addressed before technology can be leveraged for youth financial access or education.

The survey results provide perspective on the trajectory toward mobile-based solutions, but which tools are actually in use or being tested on the ground? We will explore the range of mobile-based tools for youth financial access, from financial services to financial education. These stories are not meant to be exhaustive but simply to illustrate how the tools just discussed are used today.

Practice

Financial Services.

While it seems a number of organizations and banks are gearing up to launch pilots, research, and products in the next year or have products in the very early stages, there are few examples of mobile-based banking for youth, particularly for those under 18 years old.[17]

In Kenya, Equity Bank is a leader in the field of mobile banking for youth. In 2007, the bank began offering a loan to youth age 18 to 35, which was specifically tailored to youth needs and included financial education, training, and mentoring. In 2011, looking to technology-based solutions to increase scale and reduce transaction costs, Equity Bank began offering a technology-based solution that allows youth clients to use their mobile phones to apply for loans, make payments, and deposit or withdraw money. By January 2012, the service had nearly one and a half million users.[18] Equity Bank also offers mobile banking through a mobile van, thereby giving youth without mobile phones the opportunity to make deposits not far from their homes. The bank has found that agent banking through point-of-sale devices or phone solutions is the most popular mechanism for deposit and withdrawal.

As part of the multicountry YouthSave Initiative,[19] PostBank in Kenya began piloting a youth savings account called SMATA in July 2011. Based on pilot feedback, it became clear that youth needed a flexible delivery channel, which led PostBank to offer the savings account via mobile phone and agent networks. The youth mobile savings account uses the M-PESA platform, allowing youth who have access to an M-PESA account to easily transfer money between any M-PESA account and their SMATA account via mobile phones. A youth savings account holder can deposit money into their account in three ways: through a mobile phone, as long as they have access to an M-PESA account; through a bank agent; or through a bank branch. As of May 2013, PostBank had over 17,000 open savings accounts, 35 percent of which were opened by girls. SMATA will soon include an SMS-based financial education component for current clients.

In 2012, Tunisiana, a Tunisian telecommunications firm, in partnership with the Tunisia Post, began offering a mobile banking service targeted at the unbanked, called Mobiflouss. Users purchase prepaid cards at the post office, register with the service via their mobile phones, and are instantly connected to services such as airtime top-up, peer-to-peer money transfer, and mobile bill pay. Students are able to receive government grants directly into their Mobiflouss mobile wallets. Though not specifically designed for youth, the service was heavily targeted at students, and by March 2013, most of its 128,000+ active users were under 30. Tunisiana also offers a mobile education service called MobiWorks, which aims to increase youth employment.

In 2012, Safaricom and the Commercial Bank of Africa jointly launched a new mobile banking product called M-Shwari, which is a savings and loan product that provides all M-PESA users with access to high-interest accounts and short-term loans. By the end of 2012, 75 percent of subscribers were between 18 and 35, which shows that this service is in high demand among youth and young adults. Users save their own money and then borrow against it for 30-day loans of up to about $230. The loans do not require fees or paperwork; clients simply dial a number to receive an SMS with their credit limit. Two and a half months after its launch, M-Shwari had over 1.6 million customers.

Financial Capabilities

Indonesia-based Plan International's Youth Economic Empowerment project, which links rural youth with employment and entrepreneurship skills to microfinance services, uses SMS to provide additional financial education to its youth participants. The youth, age 17 to 24 and primarily female, receive training at specialized training centers in life skills, work readiness, basic entrepreneurship, financial education, and reproductive health. The project brings employers to the youth or takes the youth to various workplaces to see the work firsthand. Additionally, the project regularly sends each participant SMSs, which, for example, encourage them to save part of their earnings each week. Anecdotal evidence suggests that the participants modified their behavior once they began receiving the messages; in fact, they went from spending their income to buy new mobile phones or play video games to competing with each other on who could save the most.

In Ecuador, Freedom from Hunger (FFH) and partner financial cooperatives provide financial education and savings services to youth. The project began simply, by providing youth in local schools with education-promoting savings and good money-management decisions. However, FFH found that financial education was not enough to encourage youth to open up savings accounts; they were not making the connection between the information they learned and their actions. FFH and its partners began strengthening the link between its financial education and actual savings products by including information on access to and use of various financial services offered by the cooperatives. More importantly, FFH and its partners began promoting the uptake of savings accounts by facilitating some of the opening processes at the school sites. In addition to in-school financial education sessions offered once a week, the student participants receive SMSs reinforcing the information they learned in class. In order to avoid dormant accounts, representatives from financial cooperatives visit young people in their schools and homes in rural areas to take deposits via a smartphone, thereby saving young people in rural areas the cost of traveling to a town to make a deposit at a branch. Since 2011, the project has reached over 10,000 youth with both financial education and access to savings accounts.

YouthSave Initiative partners in Colombia are currently conducting a randomized, controlled trial experiment that aims to measure the effectiveness of mobile SMSs and reminders to increase savings rates among youth account holders. In Colombia, 70 to 80 percent of youth, including low-income youth, own their own mobile phones.[20] The yearlong experiment, which began in March 2013, will measure whether SMS effectively promotes and increases saving rates, whether the SMS content matters, and whether SMS frequency matters. Randomly selected youth were divided into three treatment groups that receive either financial education SMSs or simple savings reminders.

Although rare examples of mobile banking with educational nudges for youth financial access exist, we anticipate that usage of both will grow substantially in the near future. A number of existing innovative mobile solutions go beyond the tools outlined above and bring financial education and more to youth. Examples of solutions under consideration or in testing include mobile stock-picking as a form of education and income earning; tablet-based education using apps; mobile gaming that aims to improve literacy; and using social media for education.[21] Still, efforts in the field to create, test, and implement solutions remain the exception, and what they have revealed is that actual innovation and new solutions have not kept pace with increasing enthusiasm for mobile solutions.

OBSTACLES TO USING MOBILE SOLUTIONS AS AN ACCELERATOR

What is stifling innovation on mobile-based youth financial access?

The lack of evidence on mobile phones and youth, particularly on financial inclusion, is most likely due to the fact that mobile financial services and capabilities, and youth financial services generally, are very new. After examining the gap between theory and practice, we find there are a number of barriers, both youth-specific and general, that the field must address before we can achieve universal youth mobile financial access and inclusion. The survey results indicated that, while there is no clear consensus across region or field as to which obstacles are the most significant, the biggest obstacles have little to do with mobile technology itself and much to do with our ability to use it to effectively reach the low-income youth demographic. This section outlines the five obstacles we think are significant inhibitors of mobile-based solutions to youth financial access.

Two obstacles that affect low-income adult and youth populations alike are infrastructure problems and the lack of social data. While certainly not exclusive to youth, infrastructure failures affect youth acutely. Adults and youth face similar challenges to accessing network coverage, which can vary widely within and between countries. As one survey respondent said, "The mobile network coverage in Ghana is still inadequate. I can't trust that my SMS will make it to a colleague; why would I trust that my money will make it to my account?" As for social data, it is difficult, if not impossible, to create and pilot a product for a target group without knowing the group's needs and restrictions. According to a global Making Cents International survey of 131 organizations, 70 percent cited not knowing how to attract or retain youth as a challenge to delivering youth financial services, and 83 percent cited a lack of market information about the youth segment.[22] This is a widespread issue and speaks to a deeper need for adequate market research before a product is offered to any demographic. When it comes to providing mobile financial services and capabilities, what we don't know about youth far outweighs what we do.

Regulation

Arguably the biggest obstacles to youth gaining access to financial services, let alone those mobile-enabled, are the legal and regulatory barriers they face, namely, the minimum age and identification requirements to open and transact through an account. Most countries require account holders to be at least 18, with few exceptions.[23] Those younger than 18 need a parent or guardian to open the account and withdraw money, although youth often may deposit money without an adult present. Since privacy is a top priority among youth, many do not wish to inform their parents about their finances and therefore are less likely to open a joint account. Moreover, 70 percent of children in the world's least developed countries do not have birth certificates or registration documents.[24] In some countries, like Uganda, youth must provide multiple forms of identification, proof of residence, proof of income, and proof of relationship between the joint account holders, thus making opening an account extremely difficult.[25] In fact, many countries do not issue formal identification cards until youth reach the age of 18. In addition, obtaining the documents is costly and arduous, which makes many parents unwilling to acquire them for their children.

Ownership

For many youth, their personal mobile phone is an object of desire and a symbol of success. In addition, for the delivery of financial services and education, mobile phone ownership is paramount to ensuring both privacy and the receipt and benefit from all educational SMSs. Unfortunately, youth face many roadblocks to phone ownership, including cost (addressed below), access to SIM cards, and power dynamics that restrict access to even a household phone, especially for girls. In nearly all African countries, including Kenya, SIM card purchases are restricted to those 18 and older.[26] So, even if a 15-year-old girl had access to a phone, she couldn't purchase a SIM card to use it. In addition, the role of gender largely determines whether girls can borrow or own their own phone. A study of mobile phone access among youth in Ghana, Malawi, and South Africa found that when girls reach puberty, their mobility and access to borrowing a phone becomes severely limited because phone access is often linked to "inappropriate" behavior.[27]

Costs

When expanding a school-banking program in Kenya to include mobile banking through M-PESA, a survey respondent found that the costs of service were prohibitive for her students. With their average deposit size being little more than the 20-shilling cost per transaction, the girls in the program found the service too expensive. Given that mobile money has been geared toward profit-making and less vulnerable populations, low-income youth (and adults) are largely excluded from services. Also, telecoms are not the only entities that charge fees; banks also charge fees per deposit or withdrawal that can further prevent usage. In fact, the United Nations Capital Development Fund (UNCDF) YouthStart program found that youth did not save in formal financial institutions, due in part to the unclear and costly transaction charges, costly or complex requirements to open an account, and high minimum balances to keep accounts active.[28]

THE ROAD AHEAD

It is clear that the hope for mobile solutions to youth financial inclusion will spur continued investigation and innovation. The reality behind the mobile money hype, however, is that we have much to learn about the youth demographic, about financial services and capabilities for youth, and about how and whether mobile technology can be used effectively to bring these services to youth. While a few examples do exist, much more must be done before we can move forward confidently.

We have identified four pressing questions that must be answered in order to maximize the potential of mobile-enabled financial services and capability tools for youth. We also provide several recommendations that we hope will advance the field.

Questions

How are the challenges unique or specific to different segments of youth?

Until we know more about boy's and girl's needs and limitations, it will be difficult to design, test, and pilot products that can achieve their financial inclusion. Understanding how youth are unique (i.e., different from adults and among themselves) will facilitate the immediate uptake and use of appropriate products and services. It also will help us get a better sense of the timeframe between where we are now and full financial inclusion. If some youth are more similar to adults than was previously thought, perhaps minor modification to existing tools is all that is necessary. Some youth are likely very different from adults, and new tools, products, and policies will need to be invented and implemented before we can reach our goals.

How can we provide these services to youth in a cost-effective manner and, for those who already benefit from appropriate services, what is needed to serve them better?

Some would argue that finding a business case for financial services for the poor is the holy grail. Long-term sustainability is incredibly important, but it remains a far-off goal. Taking lessons from adult financial services, we know that product cross-selling, gaining large numbers of clients, and client segmentation are a few strategies that can address the any losses related to providing a new product or service. Youth financial services are particularly costly, given the nature of their income. Thus, finding and creating methods of cost reduction, and finding institutions willing to experiment, are a priority.

What are the gender differences in financial services needs and mobile phone access and usage?

As with adult mobile financial services, we are beginning to understand that gender gaps in mobile phone access, ownership, and literacy are an enormous obstacle to full financial inclusion. The assumption that "everyone has a mobile phone" is a dangerous and false one: many women have very limited access to mobile phones, even if there is one in the household. Access to technology and confidence from experience with using technology are barriers that women and girls face to a much higher degree than men and boys. There is still much we don't know about how women and girls use the mobile phone. It is critical that we learn, examine, and build products and services that address and mitigate all limitations based on gender.

How can policies and regulations protect youth clients while not inhibiting their access to vital financial services?

The current policy and regulatory environment in most countries severely limits youth access to financial services and to mobile phone ownership and access, particularly for those under 18. While protecting the rights and privacy of minors is paramount, we must work with governments, regulators, and central banks to find a solution that enables youth access while keeping them, and their savings, safe.

Recommendations

Gather data. Our enthusiasm for a cost-effective and efficient financial services tool may be a bit premature, given what little we know about our target demographic. Before we can successfully invent new tools or better leverage existing ones, we must first learn much more about how youth use mobile technology and financial services. This is particularly critical when seeking a long-term sustainable product: without knowing more about youth, we cannot create or identify a model that brings financial services to a greater number of youth at little or no cost to the institution, bank, or company.

Enable innovation. Relax regulation to create an environment conducive to innovation and experimentation with mobile-based financial services or other capability tools offered directly to youth.

Prioritize the segment. Explore costing and business models that consider long-term client profitability of tech-based youth financial services. Youth need to be seen as a coveted market segment. Only then will product and service providers invest in the market research, pilot-testing and product development that will result in appropriate, viable services.

Remember that, in isolation, adequate access is an inadequate approach. Incorporate behavioral economic theory into any mobile-based product, program, and policy design. Focusing on facilitating or nudging, positive financial behaviors will enhance efforts to extend access to products and services on mobile money platforms by inculcating good financial habits early in life.

CONCLUSION

It is doubtful that youth will be able to piggyback on the advancements being made in this area any time soon without overcoming some significant hurdles. The obstacles low-income youth face in terms of formal banking, financial literacy, and account and phone ownership are significant, more so than for their adult counterparts. Lack of data and regulatory hurdles further limit our ability to immediately understand and address these challenges. Yet the allure of mobile solutions as an accelerator of youth financial inclusion remains compelling, and if the potential is as great as it seems—even if still in theory—then the imperative to find solutions to these obstacles is stronger than ever.

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Beverly Schwartz and Deepali Khanna

Future Forward
Innovations for Youth Employment in Africa

> Why do all of us as social entrepreneurs do this work? Because I believe from the bottom of my heart that poverty is simply unnecessary, and that we could end it in our generation—and that's what we work towards every single day.
>
> —Taddy Blecher[1]

WHY AFRICA?

Africa is in the midst of a social, political, and economic transformation that has brought economic growth, some newfound political stability, and increased foreign investment. A burgeoning movement of African-led entrepreneurs and institutions is emerging in a diverse array of sectors, including finance, transportation, telecommunications, and agriculture. A recent McKinsey Global Institute report looked at Africa's economic growth patterns and designated it the second-fastest growing region in the world over the past 12 years.[2] This is all taking place on the world's demographically youngest continent. Of the one billion people now living in Africa, 600 million are under the age of 25. By 2045, that number will double, representing an enormous demographic group who will be in charge of leading the continent. However, Africa also shoulders the highest burden of poverty, particularly in rural areas where the majority of the poor reside. Moreover, nearly 80 percent of the African population lacks access to formal banking services, and secondary and higher education enrolment are the lowest in the world. These are societal norms that also need to be transformed.

The present level of youth unemployment in Africa is alarming. It has reached crisis levels in certain regions, and African governments have been struggling to

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develop and adopt timely solutions within the existing system. Not surprisingly, entrepreneurship has surfaced as an important force on the continent, and its role in job creation and economic growth is being increasingly acknowledged. In light of this, more young people in Africa than in other regions are choosing entrepreneurship as a profession.[3]

Challenges to entrepreneurship can be particularly strong in Africa, where the norms for young entrepreneurs include having limited access to finance, unreliable electricity and Internet, and a host of bureaucratic obstacles that lay in their paths before starting a business.[4] Other norms, such as high operating costs and a lack of business support services, present additional challenges for young African entrepreneurs.

For all of these reasons, The MasterCard Foundation, which invests in youth learning and microfinance, has made sub-Saharan Africa a strategic geographic focus. It has committed to work with partners who are closely engaged with young people in Africa as they transition to the workforce, either as employees, entrepreneurs, or leaders. Africa is now part of a world that is evolving at an ever more rapid pace. To solve problems quickly and creatively, today's youth will require a new set of skills. To that end, over the past five years the Foundation has created partnerships with a range of organizations that promote financial inclusion and expand access to quality education for young people. By the end of 2012, the Foundation had committed $830 million to 74 projects that serve close to five million people in 49 countries. By 2020, The MasterCard Foundation will expand its area of activity to impact 20 million people living in poverty.

MAKING IT HAPPEN

At the end of 2011, the Foundation forged a partnership with Ashoka, the world's largest association of social entrepreneurs. This partnership is part of a larger effort to influence factors that will increase youth employment levels by connecting young people to the education and skills training they need to find jobs, either as employees or entrepreneurs.

Ashoka's aims are to identify and support entrepreneurs whose ideas have the most potential to have a significant impact in the areas where they work and eventually around the globe.[5] In sub-Saharan Africa, Ashoka has already identified more than three hundred new-generation entrepreneurs whose ideas both promote economic growth and advance society as a whole. These social entrepreneurs, recognized as Ashoka Fellows, were elected because of their strong ethical fiber and their innovative and scalable ideas. Together they have the drive and tenacity to disrupt current beliefs and systems.

Ashoka and its Fellows in Africa are currently reexamining their theory of change around "Youth Years," the critical ages for human development between zero and 12, and what they can do to influence how those years effect positive youth development. Ashoka postulates that "Youth Years" that are well nourished by an ecosystem consisting of physical, mental, and emotional stability, as well as formal and informal learning opportunities, will lead to a world in which everyone is able to contribute, innovate, and feel empowered to make change in their lives. For the important years that follow, the continuum to supplementary education and entrepreneurial thinking as it relates to seeking and creating alternatives to traditional employment is the added scope that the Ashoka-MasterCard foundation partnership is developing.

Due to the speed at which the world is evolving, it is obvious that the future of social innovation will require everyone to change their mindset from transactional to transformative thinking, from business-as-usual to business-as-unusual. This shift has already begun, but it will require systematic support grounded in a theory of how frameworks influence change in sub-Saharan Africa. To respond to the Foundation's challenge to find scalable and sustainable solutions to youth unemployment in Africa, Ashoka is now incorporating and synchronizing its Youth Years and Framework Change thinking, the identification of building blocks that focus on leadership, individual work patterns, and collaboration between teams, into the selection of a new cohort of 25 highly motivated social entrepreneurs. These entrepreneurs all have system-changing ideas for increasing young people's access to livelihoods. The program, called Future Forward: Innovations for Youth Employment in Africa, will provide the practical guidance that will help youth "reframe" the way they grow up, think, work together, and envision the future.

With the support of the Foundation, Ashoka will give these social entrepreneurs the resources they need to develop their innovations. The entrepreneurs will then join a network of other Fellows, which will enable them to share their work, collaborate, and create opportunities to increase the impact of their ideas.

Fellows in the Future Forward partnership have the perfect opportunity to adopt a new paradigm that could enable them to have a significant impact. By identifying and launching new ideas and building a greater cohort of social entrepreneurs who are innovating in the youth employment space, the Ashoka-MasterCard Foundation partnership will begin to change how the youth years are perceived and nurtured in Africa. As this cohort grows stronger, these young entrepreneurs will have the potential not only to generate innovative employment opportunities but to demonstrate their ability to lead sub-Saharan Africa's efforts to eradicate poverty and joblessness, to reform the education system while expanding its accessibility to all, and to create new industries and sectors that are sustainable in both rural and urban areas. Indeed, with the successful implementation of these actions, the *frame* in which youth unemployment and lack of job opportunities now sits can shift and change forever.

Something extraordinary is happening in Africa. In the wake of enhanced political stability and reduced conflicts in many countries, it is clear that a vibrant spirit of entrepreneurship is kicking with vigor. However, all is not rosy on African soil. Jobs are not keeping pace with population growth rates and issues of unemployment acutely affect the growing youth bulge across the continent, which has implications for political stability across the continent, as recently witnessed by many of the northern Arab states.

The real solution for Africa is being driven every day by African people themselves—human creativity and hard work, the spirit of entrepreneurship and the creation of small businesses—leading to job creation, enhanced socioeconomic stability, and the consequent benefits of greater purchasing power, which buys quality education and health care. Furthermore, with the growing consumer classes, population growth rates—if harnessed correctly—will prove to be a major demographic dividend.

Harnessing this dividend requires the development of two key drivers simultaneously: the demand side and the supply side. The demand side requires nurturing the fire to build a thriving business sector that in turn is hungry for talent. Stimulating the supply side requires the stocking of a quality skills base that can provide this talent to meet the growing demand for goods and services.

LEAPING FORWARD

For the past 33 years, Ashoka has honed its skills in finding non-sector-specific entrepreneurs who cover significant new opportunities that have produced innovative industries and emerging microeconomic markets all around the world. These microeconomies support and influence the growth of thousands of new jobs while addressing the root causes and effects of poverty. In the past few years, an increasing number of Ashoka Fellows have found the keys to unlocking significant options and alternative livelihoods that create a demand for youth employment. Many of them involve young people themselves who are starting their own businesses centered around employing other youth. Ashoka constantly gathers information from its Fellows on specific issues involving youth and synthesizes it into patterns that might provide value to the field and helps define their work going forward. Within this process, Ashoka identified four categories for developing a variety of creative youth employment solutions:

- Create and leverage new technical solutions designed to maximize youth employment.
- Develop and launch scalable "starter microenterprises for young, starter microentrepreneurs."
- Catalyze a new class of youth employment-friendly small business owners.
- Create new industries predicated on youth entrepreneurship.

Based on this foundation of accumulated knowledge, the partnership created an African Youth Employment Market Diagnostic (The Diagnostic), a strategic guide to help:

- **Gain an understanding of market dynamics in the youth employment field** through fieldwork and consultation with over 20 experts from all major regions of the continent;
- **Map existing solutions for youth employment challenges in Africa,** bringing attention to barriers to and principles of change; and
- **Inform the criteria for Africa Fellow selection** by distilling the principles that underlie innovative solutions and bringing attention to promising new areas to

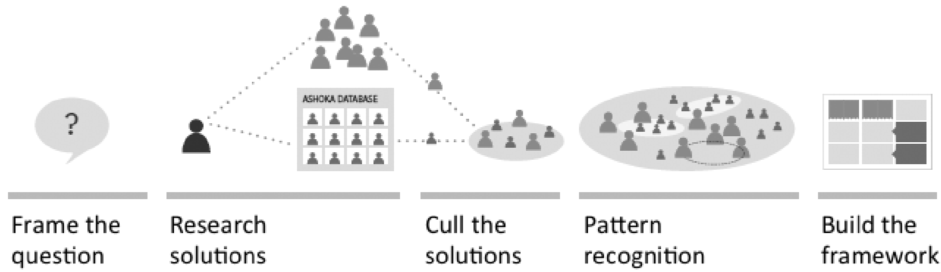

Figure 1. The Diagnostic Process

identify entrepreneurs who offer transformational solutions.

As a result of The Diagnostic mapping process, Ashoka identified four barriers that, if changed, could allow for true systemic change. Taking these barriers into account, Ashoka distilled the trends, key drivers, and highlights from their 24 interviews with Africa experts, which provided insights and strategies that identified key principles that, if leveraged, could impact widescale changes in the area of youth unemployment.

These determinants of change take many forms, and Ashoka uses them as a guide while allowing innovators to push the boundaries forward. The framing and mapping of the barriers and design principles allow Ashoka to envision the innovation gaps in the areas that would most benefit from attention. The entire exercise, and the creation of The Diagnostic, became a useful tool for understanding the scope of the problems, the issues that perpetuate them, and the areas where innovation is needed. It became clear that Ashoka needed to find social entrepreneurs working on interventions that could:

- Grow an entrepreneurial “hub culture” to foster a change in mindset and support linking young people with role models
- Facilitate financial flows by acting as a risk guarantor for youth microentrepreneurs that would mediate many of the structural barriers that prevent young innovators from succeeding
- Support intermediary organizations that match job seekers with demand, work across traditional divisions in the private and public sectors, and create more collaboration among players
- Improve systems by bringing programs together to bundle services and coordinate impact

Identifying young innovators who utilize these interventions in their models will bring more economic opportunities and create environments in which young people are in control of building their economic futures. The Diagnostic helped focus Ashoka on some key characteristics that their Fellows’ programs should incorporate.

Insights Gained through the Diagnostic

Principle 1: Place trust in young people

Exhibit a fundamental faith in young people to control their own destinies.

Principle 2: Redefine "job"

Offer flexible forms of income generation—apprenticeship, "small microbusinesses, e-commerce—and create systems or campaigns to create respectability, prestige, and growth from these opportunities.

Principle 3: Show the way

Ensure that young people have role models they can relate to, emulate, and learn from; create systems in which role models can thrive and remain in their communities.

Principle 4: Scale intermediaries

Prepare, match, and link job-seekers with opportunities.

Principle 5: Bundle solutions to create synergies and feedback loops

Target multiple dimensions of need and offer holistic servicing.

WHERE REALITY HITS THE ROAD: THE ASHOKA FELLOWS AT WORK

Equipped with insights gained through The Diagnostic, a first cohort of six Africa-focused social entrepreneurs was selected to the Ashoka Fellowship—three from Southern Africa, one from West Africa, one from the Sahel, and one from East Africa.

Dorien Beurskens

Dorien Beurskens of Mozambique founded her organization "Young Africa" on the belief that if you want to make the world a better place, work with young people. By nature they are dynamic, open minded, willing to change and look forward. The best way to use their potential is to train them to be fully integrated human beings. At the same time, "if you don't use them you lose them." She is convinced that empowering young people through skills training and income generation are key to development.

Dorien trains underprivileged youth in Southern Africa in marketable skills so they can pursue self-employment or access opportunities in the job market. She has established Young Africa centers in Zimbabwe and Mozambique that offer vocational education and training programs at affordable prices, and serve as business and social hubs for the community.

The creation of a business and social hub center—the nucleus of Dorien's model—fosters a mutually beneficial relationship among the students, the entrepreneurs, and the Young Africa program. Available space in the center, capital equipment, and the Young Africa brand are rented out to local entrepreneurs who use them to sell products and provide services to the community. These entrepreneurs also are responsible for training students in their respective fields. These practical training programs give students the opportunity to learn on the job through apprenticeships, giving the entrepreneurs access to skilled labor and a pool of potential employees for the future. Young Africa licenses out various skills-training departments to local entrepreneurs, which allows it to cover its costs and boost the efforts of local entrepreneurs at the same time. The entrepreneurs also have access to business facilities in the Young Africa centers. These resources elevate the entrepreneurs' otherwise informal ventures into well-established businesses. The synergies between the roles played by the students, the entrepreneurs, and the Young Africa centers are essential to the success of this model.

Taddy Blecher

Taddy Blecher cofounded South Africa's first free university, the CIDA City Campus, which offers students a top-quality four-year business administration degree that incorporates compulsory community service into its programs. In order to maintain a low-cost, sustainable model, Taddy created the CIDA Empowerment Fund, and to date has raised U.S. $19 million, which he has invested in the advancement and expansion of the free tertiary education movement in South Africa. Today the program includes a consciousness-based education that supports its "learn and earn" methodology, whereby students must help run and maintain the university while completing their studies and teach young people in their home villages during their holidays. Once they have graduated and secured employment, they pay for the university costs of another student, who will follow in their footsteps. This cycle enables students to focus on their development as human beings in addition to their professional training.

Karim Sy

With only 28 percent of Africans having stable, wage-paying jobs, Karim Sy of Senegal, the founder of Jokkolabs, saw "a bomb coming for the future." Like Dorien, Karim feels that he needs to empower the young generation to develop entrepreneurial skills so they can create their own jobs, but to do so differently than in the past. And that difference lies in the value of collaboration rather than competition. He sees Africa as a land of opportunity. He is creating collaborative spaces where entrepreneurs come together to share their best ideas for new ventures with each other and with a larger, virtual, open source community, breaking the assumption that success is most ensured when good ideas are cultivated in secret. These spaces nurture entrepreneurship, creativity, communication, exchange, sharing, and community. Karim believes that they will be key to changing Africa's outlook on its own future. Jokkolabs's philosophy is based on an old African proverb: "If you want to go quickly, go alone; but if you want to go far, go with others!"

Verengai Mabika

Verengai Mabika of Zimbabwe influences young people to think and act differently when it comes to climate change. His Development Reality Institute (DRI) is premised on the notion that Africa is resource rich but capacity poor, and his aim is to generate and groom innovators who will transform Africa by exploiting the same African resources that are being exploited today but in a far more sustainable way. DRI's mission is to mitigate and build society's adaptive capacity to the effects of climate change but in a unique way that has youth at the center of the solution, while preparing them for one of the more promising careers paths of the future. Through a virtual school model, DRI offers online courses that present the earth's climate system and explores the science and politics of climate change. At the younger level, capacity is built offline with school children who are organized around "cool clubs" to learn about climate change and put in practice their ideas to mitigate its effects. In only 3 years, 800 students from 28 countries have attended the courses and alumni have created successful youth-led businesses. Verengai's goal is to address the current limited available technical expertise in climate change by encouraging young people to develop the skills needed to respond effectively to climate change and become future leaders in the field.

A VIRTUOUS CYCLE IS CREATED

Frederick Ouko

Technology holds the promise of employment opportunities for people around the world, but especially for Africans with disabilities, who currently have limited employment opportunities and often live in substandard conditions. Prejudice against people with disabilities denies many of them the tools they need to escape poverty. Estimates are that over 90 percent of children with disabilities in the developing world do not go to school, and 80 percent of the world's disabled live in poverty. In a country like Kenya, where education is so valued, only an extraordinary few disabled people ever get to play catch-up with their able-bodied peers. Frederick Ouko knows all too well about the stigma and the hardships of living with a disability, as he grew up in Kenya having one. Frederick is the founder of ANDY, the Action Network for the Disabled, which works to achieve equality, inclusion, and the empowerment of youth with disabilities. ANDY helps disabled youth meet their basic needs by providing assistive devices, and through a unique internship program in which Fredrick matches the skills and passions of these disabled youth with the needs of a select group of companies. He now envisions that, with the help of technology, more people will be working from the comfort of their homes, which will help create job opportunities for people who are physically limited.

ANDY selects companies based on their willingness not only to take an intern with a disability, but to also transform their internal systems, processes, policies, and culture into one more inclusive. As these companies make the important transition to inclusiveness, ANDY plays the role of transition partner, providing the tools, resources, and guidance they need.

This institutional makeover exercise takes place before, during, and after the internship. Every company involved in this three-way relationship has been transformed into an inclusive operation, and 60 percent have permanently hired their ANDY interns. For those young people with entrepreneurial aspirations, an internship in their field of interest is the first step before they venture out to start their own enterprise. When these new entrepreneurs reach the start-up phase, ANDY gives them access to capital and other resources, thus creating a sustainable virtuous cycle. His organization is the first and only to focus specifically on the employment challenges faced by young people with disabilities on a national scale, and he is leveraging this unique position to make this a focus for the mainstream disability movement. By integrating a citizenship program that focuses on teaching policy-level change around inclusiveness into his approach, Fredrick is seizing the moment to prepare young people with disabilities for an active role in reshaping the leadership structure of Kenya.

Jude Obodo

The belief that young people should be directed into careers where they can add value and that such self-actualization is a prerequisite for national growth are not things heard very often in Africa, but Jude Obodo feels that if young people can develop their innate competencies they will be more able to contribute to the development of their country. Jude aims to empower youth by encouraging Nigeria's schools and the government to adopt his model of career guidance to replace the ineffective and moribund counseling young people now receive. Jude uses "First Preferred Innovators," a test that he developed to help him determine appropriate careers for young people. The test matches young people's values and passions with career choices that work toward fulfilling those desires. His motto is, "When one unveils who and what one is, a job is created. As their spirit connects to what they do, they will influence others." Jude is putting his values-driven ideals into action because he fully believes that, when your business is an extension of your values, your work is more fulfilling and your chances of success increase exponentially.

When asked about their reasons for getting involved with young people and working to change education systems, and vocational training and to enhance career choices, each of the six Fellows expressed their strong faith that Africa is and can keep changing. Because more people soon will call Africa home than any other continent, it is important for Africans to feel empowered, and to make sure that change does happen in a way that promotes full economic citizenship. Economic steadiness in turn should positively influence political, and hopefully environmental, stability on the continent. Most importantly, the Fellows' faith is focused on young people.

Many of the Fellows' innovative organizations don't fit cleanly into one of the five design principles described earlier, instead they overlap into several categories. But while each tackles a different facet of the youth employment picture, in the end they are all working to shape the same landscape. Some may need to bring about a change in government and industry policies; some may redefine the concept of jobs and employment and develop new job opportunities; some may bring new partners, new investors, and new intermediaries into the sector; and some may connect people to their innate abilities and career desires. All contribute to changing the perceptions of young people in terms of what they can accomplish and how they can be empowered to do so. As a result, systemic change begins to occur, thereby enlarging the market for youth employment and increasing the number of self-reliant participants in the economy. The Ashoka-MasterCard Foundation partnership also supports collaborative aspects of the work, enabling Fellows to exchange knowledge and contribute to each other's programs and the sector by bringing new components into individual program designs. At the same time, they help to cultivate a larger appreciation of the mind shift that needs to take place if each project is to realize its potential.

FROM EMPLOYMENT CREATION TO FRAMEWORK CHANGE

If these six Fellows are an indication of the new wave of social entrepreneurs who are focused on employment issues among young people, the outlook for African youth looks bright indeed. Ashoka hypothesizes that the rest of the 25 Fellows who are selected over the next two years will fill out the design principles of the current cohort, and their work may even reveal additional principles.

As the partnership between Ashoka and The MasterCard Foundation is still in the early stages, the lasting impact of this initiative has yet to be determined. However, some key factors are already emerging:

Youth participation is critical. Young people need to be part of program design, implementation, and evaluation. They want to, and should, have a voice in the interventions that affect them.

Skills training needs to respond to the demands of the market. Through market assessments and appropriate career preparation, youth can develop the life and technical skills that employers need. Through experiential learning, including internships and apprenticeships, as well as mentorship, young people will be prepared to access viable employment opportunities.

Financial literacy, savings, and access to financial services are critical. There is a great need for responsible, youth-friendly financial services and products, including access to capital for entrepreneurs. Financial literacy and savings habits should be instilled in young people at an early age. The impact of learning financial skills is greatest when woven with other elements of skills-training programs.

Technology is an enabler and provider of jobs. Technology has an important role to play for youth as a facilitator of education, small business growth, digital job creation, and financial access.

Attention to formal and nonformal learning at an early age gives us an upstream approach to youth employment. Teaching youth empathy, leadership, team-building, and change-making at an early age could be a key to stimulating youth employment of the future.

Ashoka and The MasterCard Foundation expect each of the selected entrepreneurs to create new jobs for young people, both directly and as a result of their replicable approaches being adopted by others. However, there is a larger force at work within each of the Fellows' innovations. Each of their endeavors is seeking to change the cultural norms that dictate how young people in Africa grow up, and what it will take to change the patterns that will positively disrupt the current experience of Africa's youth from the ground up. When the employment unemployment ecosystem in which youth currently find themselves a part of begins to provide accessible, quality education that leads to sustainable employment for a large percentage of the continent's youth, then the nature, content, and future of Africa will indeed have undergone the systemic social change that the partnership envisions.

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James Sumberg and Christine Okali

Young People, Agriculture, and Transformation in Rural Africa: An "Opportunity Space" Approach

Over the last decade, both agriculture and young people have become increasingly prominent on African development agendas. Politicians, policymakers, and development professionals have confronted food price volatility, food insecurity, and the phenomenon of large-scale land grabs on the one hand, and the entrenched under- and unemployment among young people—the (youthful) human face of the phenomenon of jobless growth—on the other. It is perhaps not surprising that many have put two and two together, concluding that engagement in production agriculture (including crops, livestock, and fisheries) is an obvious (if not the obvious) opportunity through which to address the problem of limited economic opportunity for young people in rural areas. Associated with this view is the assumption that rural young people would be better off if they did not migrate to urban areas, thus avoiding exposure to risky and illegal behavior (sex, HIV/AIDS, drugs, crime) and potential entanglement in dangerous political activity.[1]

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Christine Okali coordinates the gender and social difference theme of the Future Agricultures Consortium at the Institute of Development Studies. She has studied agrarian change and gender over four decades, with a particular focus on West Africa.

This essay draws heavily from the unpublished chapter, "Agricultural Policy, Employment Opportunities, and Social Mobility of Africa's Rural Youth: A Critical Analysis," by J. Sumberg, N. A. Anyidoho, M. Chasukwa, B. Chinsinga, J. Leavy, G. Tadele, S. Whitfield, and J. Yaro (2013), commissioned by the UNU-WIDER Prospects for Africa's Youth project, with additional support from the Future Agricultures Consortium.

Most of the policies and programs that attempt to engage young people in rural Africa with agriculture are essentially variants of "making markets (and globalization) work for the poor."[2] Framed with the language of enterprise, entrepreneurship, and value chains, they promote farming as a business and the professionalization of agriculture. Many such programs and projects provide training and access to microcredit, technology, and other resources. They also commonly insist on various forms of group action, for example, to engage in new markets.

We suggest that, in promoting the idea that young people living in rural areas would be better off if they just buckled down to an agricultural life, policymakers and the development community more generally are taking a position for which there is little if any evidence or supporting research. Furthermore, as enticing as the link between agriculture and employment for young people may first appear, it must be recognized that it flies in the face of longstanding evidence, that in at least some situations, both rural young people and their parents hold farming and rural life in very low esteem.[3] Indeed, investing in children's education so they can get out of farming and move on to formal work in the public or private sector is a long-established strategy in rural Africa.

In addition to the dominant discourse around market-based solutions—an important part of the background of the repeated referencing of entrepreneurship and entrepreneurial attitudes and behavior, with some initiatives promising to transform job seekers into job creators—is the current focus in the development community on "impact" and "scaling up," and the imperative to deliver "impact at scale." From an analytical perspective, this focus foregrounds questions about the nature of the expected development gains (How many jobs over what time period? What kinds of jobs? Jobs for whom?) and the role of or necessity for structural change in delivering these jobs.

A critical factor here is that many, if not most, initiatives are based on an undifferentiated view of young people. The language says it all: "the youth," as if they all have the same aspirations, talents, opportunities, access to resources, networks, interests, and needs, and will therefore benefit from the same limited array of interventions. This clearly is not the case, any more than it is for other longstanding and equally problematic categories, including the poor, women, or small farmers. While it is obvious that policy and programs cannot be designed to address the unique circumstances of every individual, one of the most important lessons from the last two decades of poverty-focused development is that context and difference matter enormously.

Our argument is that entrepreneurship-based policy and programs that address the job challenges facing young people in rural Africa need to be much more firmly grounded than is generally the case at present. Specifically, in terms of expectations, design, and implementation, they must take explicit account of the highly diverse and changing rural economic and social realities within which young people find themselves (and indeed help to shape), in addition to the diversity of the young people themselves.

In the next section, we first identify four categories that we believe are useful when thinking about work from a development perspective. We then present the notion of "opportunity space" to provide insight into the factors affecting the work opportunities available to young people in particular rural contexts. Following this, we draw on insights from feminist and gender analysis to argue that policy and programs aimed at rural young people must focus more on what roles social relations and social difference play in determining which young people are able to take advantage of which work and entrepreneurial opportunities. The final section identifies a number of policy and program implications.

OPPORTUNITY SPACE

It is widely appreciated that work opportunities, whether in the formal or informal sector, differ with respect to the skills required, level of remuneration, risks to personal safety, social status, social identity, and so on. While all these are important, from a development perspective that places poverty reduction, social justice, and social transformation at center stage, they provide an inadequate analytical base. Here we borrow from the literature on social protection to suggest that work opportunities can be seen to fall into four categories:[4] preventative, protective, promotive, and transformative (table 1). In the remainder of this article, we focus primarily on the latter two.

"Promotive" work allows real incomes and capabilities to be enhanced and capital to be accumulated. Much formal-sector work would fall into this category, but there are also examples from Africa's agricultural sector. We have previously written about young men and women in Brong Ahafo, Ghana, who use intensive, small-scale tomato production to accumulate capital over a relatively short time ("quick money").[5] With hard work and some luck, after several seasons of growing two or three tomato crops per year, these young people were able to save enough capital to build a small house, get married, establish a small kiosk, or fund an adventure (e.g., to Libya in search of work). Strikingly, few saw their future as being in agriculture, although 10 years after our original study, many still had some involvement in farming.

"Transformative" work is similar to promotive work, but it also addresses issues of social equity and exclusion. Labor laws that regulate worker rights are the most common means of addressing equity and exclusion in the formal sector,[6] and there are some examples—including the Self-Employed Women's Association in India—of organized efforts to make the informal sector more transformative. For women, transformative work might be regarded as that which increases their social status and contributes to the achievement of gender equity.[7]

While each of the four work types is important, we suggest that, for rural young people, and particularly from a developmental perspective, the focus must be on the promotive–transformative end of the continuum. It is important to remember that rural livelihoods most often include several different economic activities, which may be located at different points along this continuum.

Category	Description
Protective	Provides relief from the immediate effects of deprivation. These opportunities are directly dependent on government or other relief programs, and often form part of a broad system of benefits designed to act as a social safety net. **Examples**: food for work, labor-intensive public works schemes
Preventative	Forestalls (rather than directly relieving) deprivation **Examples**: low-productivity, small-scale farming; low-paying, insecure, informal-sector work; job-guarantee schemes
Promotive	Allows real incomes and capabilities to be enhanced and capital to be accumulated
Transformative	As for promotive above; also addresses issues of social equity and exclusion

Table 1. Four categories of work based on the transformative social protection framework.

We use the term "opportunity space" to refer to "the spatial and temporal distribution of the universe of more or less viable [work] options that a young person may exploit as she/he attempts to establish an independent life."[8] In the light of well-established patterns of both short- and long-term migration, it is useful to distinguish between near and distant opportunity space.

The near opportunity space available to rural young people is to a significant degree shaped by two sets of factors. The first of these includes the characteristics of the particular rural location, and specifically the quality of natural resources and accessibility of markets. The interaction of resource quality and market accessibility goes a long way to determining the kinds of economic activities that are likely to be viable in a particular location.[9] It is important to note, however, that as far as agricultural production is concerned, the relationship between natural resources, market accessibility, and economic viability is not always straightforward. For example, the urban demand for perishable horticulture products can be so strong that nearby producers invest heavily to overcome natural resource limitations, such as soil quality or the availability of water. The intensive vegetable production plots that can be seen in and around many African cities illustrate this well. Furthermore, there is a dynamic aspect to the relation between the quality of the natural resource base, market accessibility, and economic viability that is driven, for example, by new technology or production methods or by investment in new transportation infrastructure.

The second set of factors that shapes the near opportunity space is both social and relational. Social difference (including gender, age, class, ethnicity, level of education, and marital status), norms and expectations, and social relations and networks frame accepted ways of being and doing, as well as the kinds of activities and engagements that are considered appropriate and those that are not. In many societies, for example, women are expected to focus on household food security and welfare, which may have implications—at least during the early years of married life or when they have children—for their interest in and/or ability to engage in entrepreneurial activities, especially when these activities involve working away from home. Social difference and social relations are critical in determining how easily and under what conditions key resources (e.g., land, labor, credit, and access to services and information) can be accessed; family relations, be they supportive or constraining, can be particularly important for young people in the early stages of building a livelihood.

It is within an opportunity space shaped by both geography and social factors that an individual young person gravitates toward certain available work opportunities and away from others. This process reflects personal (individual) interests, aptitudes, and attitudes (i.e., toward risk, travel, etc.), as well as chance. It is true that the factors shaping opportunity space as we have outlined them here do not account for the rare innovator or entrepreneur who is able to imagine and act on something within an opportunity space that is simply not visible to others. However, it is critically important that those making policy and designing programs for rural young people do not get so caught up in the rhetoric of empowerment through entrepreneurship that they begin to believe that large numbers of young people are, or will be, able to become entrepreneurs. In other words, when entrepreneurship is defined as "any attempt at new business or new venture creation, such as self-employment," it obscures the fundamental relationship between entrepreneurship, innovation, and job and wealth creation.

Our basic argument is that characteristics of the rural location on the one hand and social difference, norms, and relations on the other, shape the opportunity space for members of particular social groups in particular contexts. The resulting opportunity space can be analyzed in terms of depth, diversity, and dynamism,[10] characteristics associated with the types and densities of work opportunities available to different social groups. In other words, for different social groups, some opportunity spaces will contain more, and more varied, prospects for agriculture-related promotive or transformative work than others, a fact that must inform policy and program design.

Before leaving the discussion of opportunity space, we note that many people in rural Africa, young people included, are involved in several different economic activities, either in parallel or in sequence.[11] This phenomenon of livelihood diversification may manifest itself as a shifting mix of farm and nonfarm activities, both in the short term and over the course of a working life, and it draws attention to different understandings of the notions of work and career. We also note that many rural young people, both men and women, will at some point exploit part of their distant opportunity space; for example, through temporary or longer-term migration. However, rather than cutting all links with the rural world and agriculture, a decision to explore (and exploit) the distant opportunity space can result in new capital, skills, information, and networks being incorporated into the rural economy. A longer-term view of the dynamics between the near and distant opportunity space, and between rural and urban areas, is therefore essential.

While it is certainly possible to identify examples of promotive work in rural Africa, these must be seen against a background of widespread and persistent rural poverty associated with protective and preventative work.[12] However, to achieve impact at scale will require promotive work to become the norm. This implies real structural change, which is unlikely to be an overnight (or painless) process. In any case, at least as agriculture has modernized in other contexts and regions, the creation of large numbers of promotive jobs has not generally been observed. This picture changes somewhat if the focus shifts from production agriculture to the agriculture and food system more broadly, where urbanization, changing patterns of labor force participation, and rising incomes result in increasing numbers of formal-economy and potentially promotive jobs in areas such as transport, processing and manufacture, food retail, and catering.[13]

Central to the arguments in this essay is the categorization of work presented above and the factors determining the presence (or absence) of opportunities at the promotive–transformative end of the continuum within particular opportunity spaces. In the next section, we extend this analysis by drawing on the considerable feminist scholarship around the concept of social transformation, and the need to challenge norms of behavior that structure advantage and disadvantage if the status and position of disadvantaged groups are to be transformed.

TRANSFORMATION, SOCIAL RELATIONS, AND ENTREPRENEURSHIP

Important and longstanding bodies of scholarship address the particular social, economic, political, and psychological dimensions of youth, as well as the various challenges faced by young people as they begin to make their way in the world. However, young people in rural Africa do not figure prominently in this literature, and when they do appear, the focus is mainly on health, HIV/AIDS, and risky sexual behavior.[14]

For this discussion, therefore, we draw primarily from feminist scholarship. This is logical in the first place because of the various ways in which age and gender intersect, and because the understanding of power and power relations that is at the heart of feminist and gender analysis provides insight into these interactions. Second, as we have already indicated, the experience and opportunities of young people are gendered, and feminist literature provides some critical insights into the implications of gendered life experiences that can inform the design and implementation of development programs.

But we need to focus first on the link between development and transformation, particularly as we start with the conception of development that has poverty alleviation and social justice at its core. Feminist scholars and activists use the term "transformation" to refer to a change in the status and position of women (described as subordinate) relative to men. Transformation comes about through individual but especially through collective action that challenges entrenched institutions and power relations. Women's agency is placed at center stage, but it is recognized that their ability to act may be limited. In relation to work, the focus is on the relative terms and conditions of employment for men and women, but more broadly on the relative value attributed to work done by men and women in all sectors and domains, including unpaid domestic work. In this context, transformative work is as much about being in a position to exercise choice as about the work per se, and the struggle is against women's "constrained inclusion" and "adverse incorporation" into labor markets.[15]

This understanding of transformation contrasts with the narrower notion of women's economic empowerment that is common currency in much development practice. Here the emphasis is on individual women having control of their assets and income; as such, economic empowerment is presented as individual self-fulfilment, with clear ownership rights incentivizing individual as opposed to collective action. The anticipated economic and social impact of this model of empowerment—including expectations that women will forgo their own needs and interests in favor of their children and household—are then used to justify state and development agency investment that promotes women's economic activities. A focus on women's empowerment thus becomes "smart economics."[16]

The major limitation in this conception of economic empowerment is the fact that men and women exist and act within a network of social relations, and, moreover, that to some extent these social relations (with spouses, siblings, parents, friends, kin group members, etc.) both enable and constrain action. Decisions are seldom taken or implemented by men or women in isolation, with no reference to joint interests and projects or to the interests and projects of others. Thus, a simplistic conception of individual decisionmaking and individual action can be dangerously misleading.

We find these contrasting views of transformation and social relations useful because young people, whether male or female, also depend on support from others—on their social relations and networks—as they start to explore the local opportunity space, enter the world of work, and begin to build their livelihoods. Assistance comes in many forms, and parents and/or the domestic unit is rarely its only source. For example, our work with young, male, cash-oriented tomato growers in Ghana demonstrated clearly that the success of their activities depended on sisters, mothers, or aunts preparing their daily food; on family or others providing (through rental arrangements or otherwise) access to scarce riverside land; and on working together with friends on one another's plots at peak times. These young men were anything but atomized, isolated, or individualized economic actors. On the other hand, the fact that in many cases they were not encumbered by other social relations and obligations—arising, for example, through marriage or childbirth—gave them additional room to maneuver. There is a sense that young people, and perhaps particularly young men, occupy a social space where the rules are relaxed, thus giving them additional latitude to experiment and explore.

Although we are arguing that social relations must be taken seriously when both analyzing opportunity space and promoting individual entrepreneurial activity, we are at the same time forced to recognize the importance of social difference in determining which individuals can make use of particular opportunities. This is especially important in relation to young men and young women, largely because of entrenched views of what is appropriate behavior for one or the other at different points in the transition to adulthood, and the way in which these influence policy design, implementation, and outcomes.

Ideally, we should be seeking to understand the work and income-earning decisions (of young people, adults, households, and families) in the context of their economic and social lives as a whole. This would then shift the focus toward a greater understanding of the interdependency and linked lives of men and women, both within households and families and across generations. While network approaches and life-course analyses are well established in the social sciences, to date they have gained little traction in development practice. This kind of approach would specifically help to highlight the changing ways men and women engage in agriculture, rather than working on the assumption that one size (e.g., professionalized farmer) fits all, and at all times. It would also force us to agree that neither transformation nor empowerment look the same for everyone, nor are they fixed or permanent states.

This brings us to the links between transformation and economic empowerment on the one hand and entrepreneurship on the other. What is the theory of change supporting entrepreneurship as a key development intervention for rural young people? We suggest that in practice the entrepreneurship agenda is less about transformation in the feminist sense of changing structures and power relations (although there are initiatives to engage young people in political processes[17]) and more about the inclusion of rural youth in the current structures and power relations. While this might be construed as a staged approach that initially emphasizes promotive over transformative work, there is no indication that this is actually the case, or that transformation in the broader sense is even on the agenda.

There is a real risk that the rhetoric of transformation and entrepreneurialism (with images of innovation, new opportunities and markets, risk-taking, but above all significant job creation—and implying at least the potential for transformation) is being used to mask initiatives that in reality are much less ambitious. Our sense is that many of these are essentially about creating opportunities for self-employment and petty trade, which may not have much potential to be promotive, to say nothing of transformative. To confuse self-employment and petty trade in the informal sector with entrepreneurship is not helpful.

If this analysis is anywhere near the mark, there are important questions to answer about the potential nature and scale of the anticipated development impact (i.e., How much new work? Will it be promotive? Where will it be located? Who will be able to take advantage?), about value for money, and so on. It also raises questions about the potential effect on the challenges, processes, and dynamics that worry policymakers and development specialists; for example, under- and unemployment, the migration of young people from rural areas, aging farm populations, and the progressive hollowing-out of rural communities.

Finally, and perhaps most importantly, we are left with the question of whether small-scale agriculture (or agriculture of any scale or type) combined with microenterprise provides a credible basis for economic empowerment or transformation at scale; if it does, where, under what conditions, and for whom is this likely? More broadly, what does this imply for the jobs agenda across both rural and urban areas?

POLICY AND PROGRAM IMPLICATIONS

The new policy and development interest that has coalesced around young people, agricultural production, and work in rural Africa is clearly to be welcomed. However, in this essay we have argued that if policy and programs are to be successful they will need to be much more firmly grounded in life-course analysis and an appreciation of the various ways that rural men and women might use agriculture to serve their needs and interests. Such a social and economic analysis must be context-specific and must address difference and diversity in relation to both rural locations and young people. Critically, it also must highlight the social and relational aspects of young people's lives and worlds. We have suggested that the notion of opportunity space provides a framework that can facilitate such an analysis.

More nuanced analysis along the lines we suggest should result in policies and programs that are better grounded in the reality of difference among both young people and rural locations. It is also important to begin to trim the unrealistic expectations generated by the rhetoric of empowerment through entrepreneurship. At present there is little evidence about how, in what situations, or for whom these programs deliver promotive or transformative work opportunities. Furthermore, much more needs to be done to understand the likely effects of the modernization of the production side of African agriculture on the availability of promotive or transformative employment opportunities for young people in rural areas.

While it is tempting to conclude that agriculture can and should be a central part of the solution to the employment problems faced by the present generation of African rural young people, we suggest that the real development challenge is in relation to future generations. If the transformation of African agriculture, and the agrarian economy more broadly, proceed apace, the critical questions over the next five to ten years are these: How many and what kinds of agriculture and food-related jobs will be created? Where will they be located? What knowledge and skills will be required? What kinds of education and training programs will be needed? Now is the time to address these questions systematically. While entrepreneurship will certainly have a place, the young people who engage with the agriculture and food sector will increasingly do so as employees of formal-sector businesses. Crucially, the sector's ability to attract and keep young talent will depend on the degree to which these positions are at the promotive–transformative end of the work continuum. However, if demand for these types of jobs continues to outstrip supply, with the exception of reputational risk, there may be little motivation for the sector to move in this direction.

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John Owens

Offering Digital Financial Services to Promote Financial Inclusion: Lessons We've Learned

Since 2004, interest has grown in using technology to provide financial services to the unbanked and underbanked.[1] Much of this interest is thanks to the dramatic rise in the number of mobile phone subscribers in emerging economies, which now exceed the number of bank accounts in most countries. Increased numbers of subscribers, combined with the early success of mobile money in countries like Kenya, are driving interest in mobile money and mobile financial services (MFS) to expand the outreach of financial services. Though the excitement and interest in this sector continues, the past year has seen a shift to a broader use of technology to reach the unbanked. This new area of interest, now referred more broadly as digital financial services (DFS), takes a more comprehensive view of supporting financial inclusion by involving a much broader range of institutions.

Among the institutions that have provided and helped shape the new emphasis on DFS to support financial inclusion are the Bill & Melinda Gates Foundation[2] and a wide range of public- and private-sector members in the Better Than Cash Alliance,[3] which focuses on using electronic funds transfers as well as mobile money to speed the shift to DFS.

In this paper, I focus on this broader approach to improving financial inclusion via DFS and share lessons learned from a practitioner in the field point of view.

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DEVELOP A ROAD MAP

When offering DFS, it is important to plan the offering carefully by developing a road map. That map will respond to questions about the customers, the market, the regulatory framework, the institutional framework, product development, pilot testing, and product launch.

Customers

Start by considering your customers. Since many of the DFS solutions today focus on the growing number of ways to use mobile phones, it is especially important to consider the types and uses of mobile phones by the target market. The questions below are some of the most important.

- Do people in the target market own mobile phones, and if so, what types (feature phones, smart phones)?
- What do people use their phones for? Texting, calls, MMS, data?
- What does DFS actually offer to customers? What would customers really need and use DFS for?
- Could customers afford the solution being proposed? How does it compare to other options they currently use to make payments, send and receive money, or even buy and sell goods and services?
- Finally, are these services easy to use and user-friendly, given the level of technology literacy among those in the target market?

In our early experiences in the Philippines, we found that most clients were quite comfortable using a mobile phone and texting messaging was quite common. This made introducing mobile money payments that were based on SMS much easier than in other markets, such as Afghanistan, where people were not as text savvy.

Market Conditions

In addition, anyone offering these services must consider the unique market conditions in each country and region. Of course, it is valuable to learn lessons from earlier, already successful innovators, but the unique aspects of the operating environment are crucial, leading to the questions below.

- What is the nature of the financial and retail market? How developed is the payment market?
- How many point-of-sale machines and ATMS exist in the country? How widely are they used?
- What is the domestic and international remittance market like?
- How many existing transaction points exist for remittances or agent banking?
- What banking services are offered and what is the banking infrastructure like?
- What is the overall level of financial/electronic literacy? Are people comfortable texting and using SMS?

- How many people have access to financial services and what is the range of these services?

In 2005, there were few point-of-sale machines or ATMs and few money transfer agent locations in Kenya, which was in stark contrast to other countries like the Philippines. This made a big difference in the value proposition of making use of mobile money to promote financial inclusion. Markets that have a more extensive payments infrastructure and money transfer network, such as most markets in Latin America, are now part of the movement to look at broader DFS, as opposed to much of Africa, which continues to focus much more on various use cases of mobile money.

Regulatory and Policy Framework

The overall regulatory and policy framework for DFS is also one of the most important aspects to understand when planning to use these services to promote financial inclusion. Fortunately, many regulators are now more open to seeing their role as economic enablers rather than just gatekeepers, so they are now more often engaging with private-sector players to develop a more pragmatic regulatory enabling environment. In addition, regulators around the world are now sharing experiences so they can promote policies for financial inclusion. In particular, the Alliance for Financial Inclusion (AFI), a global network of policymakers in emerging and developing countries, now coordinates with over 109 regulatory bodies in 89 countries. Founded in September 2008, AFI is trying to speed up the adoption of innovative financial inclusion policies so it can make formal financial services more accessible and useable to the billions of unbanked people, partly by developing an appropriate regulatory framework. In addition, regulators are increasingly understanding the role and importance of innovations like DFS.

In looking at the regulatory framework, DFS providers need to ask about several kinds of laws. These might include laws on electronic (and mobile) banking, e-money, and payments, along with laws and guidelines for banking agents and/or e-money agents. Other regulations that are important to understand are Know Your Customer and Customer Due Diligence rules for banks and financial institutions.

Key additional questions to ask about the regulatory framework include:

- Do the financial regulatory authorities take a risk-based approach to DFS?
- Who can offer e-money services? What services are allowed and what are the limits?
- What are the rules on setting up agents?

This difference is also crucial in the judicial framework that governs DFS and other services. As pointed out in a recent report on financial services, “In most Latin American countries, civil law presides, while African nations tend towards British common law. In the case of the latter, if there is no specific law on the books then a (mobile money) service can operate without much regulation at all, whereas in a civil framework, regulation must be introduced.”[4]

Institutional Perspective

A consensus is growing that true financial inclusion will require a full range of institutions, strategic alliances, and partnerships. These can include governments and mobile network operators, along with various financial players such as banks, payment providers, credit cooperatives, microfinance institutions, and third-party operators. In looking at the institutional perspective, the following questions arise.

- What are the existing products and services that DFS will create, complement, or replace?
- What revenue strategies can be employed to make partnerships work?
- Will offering DFS reduce costs, improve efficiency, and/or make financial transactions more secure?
- Which players in the market can be combined into the best potential network? Can they implement and use technology that will enable DFS?

In the Philippines, G-Xchange Inc (GXI), a licensed e-money provider was able to successfully collaborate with the Rural Bankers Association of the Philippines (RBAP) with the support of USAID's Microenterprise Access to Banking Services (MABS) program. The program and RBAP were able to systematically determine what types of services made sense and how they could be provided to complement the services offered by rural banks.[5]

Product Development

Once you understand the client, the environment, the regulations, and the institutional capabilities, it is time to design the product. This process also includes building a business case, desk-testing the product, getting feedback from focus groups with participants from the target market, and beta-testing your services.

Some of the key steps in product development include:

- Define the product features based on what clients will really use the services for; I call these real-life use cases.
- Decide on the technology to use. For those making use of MFS, there are a range of options and formats to choose from.[6]
- Establish a monitoring system to track performance by projecting targets in terms of both registration, active users, and the number and volume of transactions.
- Clearly define an implementation plan by getting all partners to agree on roles, responsibilities, and a timetable.
- Develop appropriate and easy-to-follow user guides.
- Develop contingency plans for network-related problems like system down time or network failure.
- Provide for 24/7 customer service; be sure staff can understand and properly address customer concerns. Make sure there is a tracking system in place to monitor customer queries and concerns.
- Develop an appropriate marketing budget that accounts for above-the-line and below-the-line costs, and direct marketing during this phase.[7]

- If you are offering agent banking or using agents to provide for MFS, plan to roll out and manage an agent network.[8]

Pilot Test

All too often, pressure to go to market keeps providers from conducting a pilot test or stress test before the launch. It is important to note that Safaricom spent over two years understanding the market, designing and pilot-testing its services before it rolled out M-Pesa.

ACCION International stresses the importance of pilot testing. As it correctly points out, using e-money or agent banking to promote financial inclusion, especially for a bank, requires proof-of-concept testing. This means that the provider must have much of the functionality and customer-value proposition in place before going to market. This is crucial because it is difficult to isolate which variables lead to successful adoption. For example, imagine that a bank pilots a mobile banking service that would let clients use e-money to repay loans-but it gets little response. What might cause the low uptake? Lack of product awareness, insufficient staff training, poor product design, entrenched competition, or some other factor? Without a pilot to answer such questions, the bank might abandon an otherwise promising mobile banking service, even though the key could be something as simple as a personalized marketing campaign to increase adoption.

In addition, stress tests are valuable to ensure that services work as designed. If you identify any potential weaknesses, check what is and is not working and make appropriate adjustments to ensure that the service works before rolling it out. If the pilot succeeds, then plan for your full product launch but be flexible to take advantage of new demands that consumers may present.

During the pilot test, several elements deserve attention.

- Are the systems working as planned?
- Is the network signal or technology supporting the DFS sufficiently available in the regions where the target market is located?
- Can customer service and back-office staff understand and manage the service? More important, do customers and businesses understand the services and can they use them? This is where the importance of financial education also comes into play.

The lessons learned during the pilot can help DFS providers determine the best approach to launching the product in the market.

Strategic Partnerships Are Key

Strategic partnerships are key to anyone offering DFS to promote deeper financial inclusion. Partnerships are currently being formed and promoted that include a range of international donors, governments, banks, financial institutions, payment providers, and other companies that provide or sell products and/or services to the poor.

With last year's announcement of a consortium of public- and private-sector institutions under the Better Than Cash Alliance, a range of large and influential players are now providing support for a shift to electronic payments, including the use of mobile money.

Donors

Donors, such as USAID, are providing hundreds of millions of dollars in foreign aid assistance and leveraging billions in combined public-private partnerships. Many of these projects have long histories of supporting and working with large networks of private- sector players that reach millions of people at the base of the economic pyramid. Several of these projects are looking for ways to improve efficiency and outreach, especially around payments. DFS can play a role here, as the examples below illustrate.

USAID/Philippines offers an early example of how DFS can be used to increase financial inclusion. From 1999 to 2012, its MABS program worked in partnership with RBAP to expand access to banking services to almost one million new clients.[9] By leveraging its long history and experience working with the rural banking sector, USAID was able to facilitate a partnership between RBAP and Globe Telecom's e-money issuer, GXI, which helped to accredit over 1,100 rural bank agent locations and facilitated more than $400 million in mobile money-related banking transactions.[10]

In Nigeria, USAID's very successful MARKETS II project works with approximately a million Nigerian small farmers, businesses, suppliers, buyers, and traders across multiple agricultural value chains. It is now looking at using mobile money to promote better access to and use of financial services. This project has a long history with key players and farmer organizations across the country. By leveraging this network, in partnership with new mobile money operators (MMO), it is supporting greater financial inclusion efforts that benefit the operators, small farmers, suppliers, and the project goals.[11]

USAID/Afghanistan's Financial Access for Investing in the Development of Afghanistan project has been providing extensive support to develop DFS there. It has developed an association of MMOs and supported a variety of services that enable mobile payments, including utility bills and payrolls.[12] In addition, USAID has been supporting customer education and the use of mobile money services in several other countries that focus on greater financial inclusion, especially in Colombia, Peru, Haiti, the Philippines, and Indonesia.[13] Other examples of donor collaboration to support DFS include the UK's Department for International Development (DfID), which helped support Vodafone when it initially pilot tested M-PESA.

Governments

When designed with financial inclusion goals in mind, electronic payment programs can give people an on-ramp to greater financial access while providing governments a more efficient, transparent, and safer means of disbursing benefits like pensions and social welfare stipends.

Governments are the biggest generators of payments globally, estimated at over US$40 trillion in 2009. They are also realizing the importance that DFS can provide to help them to be more efficient, transparent and improve the safety of government-to-person (G2P) payments. In addition, DFS, when designed properly, can also dramatically improve financial inclusion. A recent World Bank study on payments noted that, worldwide, governments are the biggest generators of payments. While only 25% of developing countries are currently using electronic funds transfers, 90% of governments see the need to improve the overall efficiency of their payment systems and this is an area where DFS can assist.[14]

One of the success stories includes the example of the government of Colombia which had one of the most rapid transitions to electronic payments which helped to transition over 2 million households that received electronic G2P transfers via a card-linked bank account.[15]

Payment Providers

In 2000 in the Philippines, Smart Money made the first attempt to link mobile money products to payment networks by issuing a linked MasterCard debit card to its mobile money platform. More recently, interest has been rising in integrating mobile money platforms with international payment networks to provide access to broader DFS. Both MasterCard and Visa are investing substantially in projects that integrate their products with mobile money platforms in multiple markets. American Express has also recently launched a linked Virtual Card with GCASH in the Philippines.

Only a few years ago, many were arguing that mobile money transfer systems could completely side-step the traditional payment operators in the developing world. This, however, is not happening. Instead, interoperability and interconnectivity are now the new buzzwords in the DFS industry. We now see various technologies and systems converging to broaden access via multiple channels that build on both mobile networks and existing ATM and point-of-sale (POS) networks. Ultimately, mobile phones could become fully enabled m-POS machines, reducing the need for traditional POS machines and/or ATMs, but, for the time being, the opportunity still exists to build on existing ATM/POS networks.

Those promoting mobile money solutions faced challenges in directly connecting their systems to stores, but these challenges are now being addressed through greater linkages and collaboration with payment providers. As MMOs that have provided linked debit/ATM cards have discovered, even the poor can and will use cards. In fact, we see many examples where the poor like the option to pay or withdraw funds using a card. Many clients I have talked with in rural areas also liked having the status symbol of carrying an ATM/debit card with them.

Businesses

Businesses that provide goods and services to the base of the economic pyramid are becoming another type of partner that those offering DFS are beginning to focus on. Among these types of businesses are suppliers such as fast-moving consumer goods (FMCG) distributors,[16] outlets selling farm inputs, businesses that facilitate remote purchases for small businesses or individuals, transportation operators, and utility companies.

FMCG distributors are also starting to notice the cost savings that DFS brings to some markets. The Bank of the Philippine Islands (BPI) partnered with Globe Telecom to set up the first mobile money-enabled bank in the country, called BPI Globe BanKO. In late 2012, BPI Globe BanKO started offering its services to several FMCG distributors in the Philippines. Likewise, in Nigeria, Stanbic Bank has used its mobile money wallet to provide collection services for 7-Up. This not only makes it easier for small businesses and larger distributors to improve efficiency but save money as well."

DFS can also allow farmers to more easily purchase products like farm inputs, feed, seeds, and fertilizer in ways that traditional brick-and-mortar financial providers cannot offer. Efforts are now underway in Kenya, Nigeria, and elsewhere to use DFS to reduce the costs associated with cash payments for agricultural inputs.

Transportation is another business that can benefit from DFS. Around the world, millions of people pay for transportation every day. In emerging markets, many wait in long lines to take mass transportation, especially around the holidays when they arrive at a bus terminal or ferry port, only to discover that tickets are sold out. These customers would benefit from being able to order and/or pay for a ticket in advance. Here, DFS can provide real and substantial benefits for low-income people while at the same time encouraging them to make fuller use of these services to broaden financial inclusion. In Fiji, Vodafone's mobile money service, M-PAiSA, is facilitating an e-ticketing system for the bus companies that combines mobile money with near-field communication-enabled cards. This not only fulfills a needed service but also encourages uptake of DFS.

BUILD TRUST

Trust is essential in providing any financial service, especially one built on a technology platform. Developing this trust requires building on services from respected DFS providers-as well as ensuring safeguards and a focus on excellent customer service. Key to developing trust is the overall image and reputation of the MMO, whether it is a mobile network operator, bank, or third-party provider. The same goes for ensuring safeguards and trust in mobile money agent networks.

Visa's 2012 Mobile Money Study of nearly 2,500 consumers, mobile money agents, and merchants in Bangladesh, Ghana, India, Indonesia, Nigeria, and Pakistan revealed the importance of trust. Across these countries, respondents cited a lack of trust in mobile money providers and agents as a top barrier to adopting mobile money.[17]

Mobile network operators (MNOs) that invest in or set up e-money issuers (offering mobile money) have generally played a unique role and have certain advantages over banks. MNOs normally reach millions, if not tens of millions, of customers in emerging economies and know how to cater to the mass market. They have often become trusted providers of an important service-communication-and are often highly visible. They have an extensive agent network and are often the largest mass marketers in emerging markets. The trust, reputation, and image that most MNOs have built represent important advantages over banks when offering e-money (mobile money services).

In Kenya, Safaricom was well known for developing trust among customers. Olga Morawczynski and Gianluca Miscione documented the significant relationship between trust and Safaricom's long and established history in Kenya.[18] Interestingly, they found, many M-PESA users did not really trust their agents, but they did trust Safaricom-and that was a principal reason that they decided to continuously use M-PESA. As the researchers pointed out, since customers were turning over cash to be held by the MMO, they had to have faith in the company behind the mobile money service to ensure that their funds were safe and readily available when needed.

Banks in Kenya often had a harder time developing this same type of trust among those in the mass market. However, banks can build on the reputation of MNOs and their mobile money services to encourage greater financial inclusion. For example, the Commercial Bank of Africa partnered with Safaricom in November 2012 to offer M-PESA customers a savings and credit facility called M-Shwari. The service was managed by the bank and offered over Safaricom's M-PESA platform. Requiring no paperwork or visits to the bank, M-Shwari was a completely new approach to basic banking services in Kenya.

M-Shwari netted over 70,000 registrations in its first day and within the first month, helped generate over 1 billion Kenyan shillings in deposits—a level which took other banks in Kenya months or years to reach—and by April 2013, served over 3 million customers. M-Shwari, riding on M-PESA's rails, is considered one of the most successful new DFS products in the African market.

In the Philippines, when Globe Telecom's GCASH partnered with its first rural bank, PR Savings Bank, to offer mobile money-enabled payroll services, trust was crucial for people to rely on this new service. As in most countries, payroll is a very sensitive matter in the Philippines: it must be reliable and funds must be readily available. In the early days of GCASH, Globe's e-money subsidiary GXI went to great lengths to ensure that the service was always up and running; it even appointed special regional point persons to ensure that everything worked smoothly.

Apart from forming partnerships with successful MNO-led mobile money initiatives, banks often face challenges when offering DFS, whether in the form of e-money, mobile banking, or agent banking. Banks have not traditionally catered to low-income and rural markets and generally do not invest in the type of mass marketing that MNOs do to both market their services and build trust. However, newer banks are now building their images in the low-income segments of the market and establishing trust in ways that traditional banks have not normally done in the past. Some of the new banks successfully offering DFS include Tameer Bank in Pakistan, bKash in Bangladesh, and BPI Globe BanKO in the Philippines. All have gone to great lengths both to build trust and to market services to low-income clients.

This need for banks to work on trust is completely changing the way they interact with customers. For example, many are now establishing excellent around-the-clock customer service hotlines, which includes ensuring that hotline operators can provide a tracking number and/or call customers back to ensure that questions and complaints are dealt with promptly.

Developing and ensuring trust in agent networks is another important point to address in offering DFS. Poor customer support and service within the agent network can erode customer trust. As the study on M-PESA noted, customers' trust in Safaricom was enough for them to trust the service. However, certain standards in managing agent networks must be in place for clients to develop trust and confidence in mobile money services. Agents must have sufficient liquidity, proper branding and merchandising must be in place at the agent location, proper step-by-step instructions must be available, and several other important safeguards and measures must also be in place.[19]

CONVENIENCE AND AVAILABILITY

Anyone dealing with other people's funds knows that it is essential for them to have rapid, reliable, and convenient access to their money when and where they need it. Likewise, DFS must be easy for anyone to access and use. Those offering agent banking or relying on agent networks for mobile money services must have an extensive and properly managed agent network so that customers can easily cash-in or cash-out of their mobile money wallets. In addition, as I pointed out above, it is becoming increasingly important to interconnect with other platforms, for example, linking mobile money services to bank accounts, and/or debit cards and ATM platforms.

Over the past few years, we have seen a shift in the way MFS are being offered, away from simple SMS and SIM Toolkit menus toward a better range of menu interfaces that have made it much easier and more convenient for clients to access and use a broader range of mobile-enabled DFS. Unstructured Supplementary Service Data (USSD) menus are now much more common and can be used across all mobile phone handsets.[20]

For smartphone users, many banks and other e-money providers also provide applications that make DFS much easier to use than in the past; now the user need not remember multiple numbers to input, since regular transaction details can easily be stored for the next transaction. In several markets, including Afghanistan, India, and Nigeria, we are also beginning to see companies offering interactive voice response technology for those who are not literate, with the system talking clients through their transactions.

In order for customers to conveniently and easily access DFS, the entire process of registering for an account must also be quick and easy. Ideally, DFS providers should not charge to open an account or register for a service, and clients should be able to use the service within minutes. In several markets, regulations and more simplified KYC guidelines are making it easier for banks and other DFS providers to open accounts quickly. In Nigeria, for example, thanks to a tiered KYC process, e-money issuers allow new customers to register via a mobile phone and start using the service immediately for small-value transactions, without the need to go to a bank or agent.

One of the most important aspects of providing convenient and accessible DFS is an extensive agent network. Neil Davison and Paul Leishman have observed correctly that "the (agent) network serves as the customer's bridge between cash and e-money; it represents the human face of a service, and the vehicle for boosting product awareness, customer education and registration."

As banks and other e-money providers begin to rely on agent networks, they have to get the timing right. The DFS provider must activate its agent network fairly quickly so it has enough transaction points to support its client base; otherwise clients will quickly lose interest in the service. On the other hand, if the provider activates the network too quickly, without enough active clients, the agents will soon forget how to facilitate transactions or will lose interest in offering the service. This makes it essential to roll out the agent network carefully and strategically.

While progress in the MFS space has not advanced as quickly as many predicted just a few years ago, the recent emphasis on DFS is a welcome shift, as it encourages a much broader set of both old and new players focused on financial inclusion to enter the marketplace. In this new era, this pragmatic approach, with an entire range of public and private institutions working together, has a much better chance of accomplishing deeper financial inclusion than we have seen in the past. I, for one, am much more hopeful about the future.

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1. Among the earliest papers in this field and one that inspired me is David Cracknell's 2004 "Electronic Banking for the Poor: Panacea, Potential and Pitfalls" at http://www.microfinance-gateway.org/gm/document-1.9.29225/25231_file_MicroSave_ebanking.pdf
2. See Gates Foundation, *Financial Services for the Poor Strategy* available at http://www.scribd.com/doc/118777907/Gates-Foundation-Financial-Services-for-the-Poor-Strategy-Overview
3. For more on the Better Than Cash Alliance see http://betterthancash.org. The group's founding members include USAID, Gates Foundation, Omidyar Network, UNCDF, the Ford Foundation, Citi, and VISA.
4. BN Americas Financial Services Intelligence Series May 2013 "Reaching the unbanked: Can mobile banking deliver on its promise," available at http://member.bnamericas.com/webstore/en/intelligence-series/reaching-the-unbanked-can-mobile-banking-deliver-on-its-promise
5. For more information, see www.mobilephonebanking.rbap.org
6. For more information, see Ben Davis and John Owens, "Choosing a Mobile Phone Banking

Format, "MicroSave Briefing Note 67, available at http:www.rbapmabs.org/blog/wp-content/uploads/2009/02/BN-67-Communication-Formats-for-M-banking.pdf

7. For useful examples see M. Yasmina McCarty, *Marketing Mobile Money: Top 3 Challenges*, London: GSMA, 2012, available at http:www.gsma.com/mobilefordevelopment/wp-content/uploads/2012/09/GSMA_Marketing_Webinar_08Jun12.pdf
8. Among the many articles on this topic, among the best are Neil Davidson and Paul Leishman , Building, *Incentivizing, and Managing a Network of Mobile Money Agents: A Handbook for Mobile Network Operators* available at http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2012/03/manage.pdf and Ben Davis and John Owens, "Incentivizing 3rd Party Agents to Service Bank Customers" (MicroSave briefing note no. 69), at http://www.rbapmabs.org/blog/wp-content/uploads/2009/02/BN-69-Incentivising-3rd-Party-Agents-for-M-banking.pdf
9. For more information see *Innovations in Expanding Access to Microfinance Microenterprise Access to Banking Services (MABS) Program Phase 4 Final Report* available at http://mabs4final-report.wordpress.com
10. For more information see the video Distant Access available at http://youtu.be/7HdnrEKrG_U
11. For more information see USAID/Nigeria Markets II Program Working with LAPO & eTranzact on Mobile Money Initiative, available at http://mobilemoneyfordevelopment.wordpress.com/2013/05/20/usaidnigeria-markets-ii-program-working-with-lapo-etranzact-on-mobile-money-initiative/
12. For more information on the FAIDA project see http://afghanistan.usaid.gov/en/USAID/Activity/185/Financial_Access_for_Investing_in_the_Development_of_Afghanistan_FAIDA
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16. See Social Cash Transfers and Financial Inclusion: Evidence from Four Countries http://www.cgap.org/sites/default/files/Focus-Note-Social-Cash-Transfers-and-Financial-Inclusion-Evidence-from-Four-Countries-Feb-2012.pdf
17. See an analysis of this opportunity in the article "Rising Africa–the Case for Consumer Goods and Mobile Payments" available at http://www.mobilemoneyconsulting.com/2013/03/15/corporate-payments/rising-africa-the-case-for-consumer-goods-and-mobile-payments#sthash.W7ll7fau.dpuf
18. The Visa study is available at http://pressreleases.visa.com/phoenix.zhtml?c=215693&p=irol-newsarticlePR&ID=1748481&highlight=
19. Olga Morawczynski and Gianluca Miscione, Exploring Trust in Mobile Banking Transactions: The Case of M-PESA in Kenya, available at http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2009/02/Exploring-trust-in-Mobile-Banking.pdf
20. Davidson and Leishman, and Davis and Owens, both cited above, provide detailed steps on training agents to build trust.
21. For more on mobile banking and mobile money formats, see Davis and Owens.

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