

CITY OF VANCOUVER

DIGITAL STRATEGY



April 2013

About this report

This document presents the City of Vancouver’s Digital Strategy. It provides background on the current state, the results of the consultation process, the goals and objectives, the strategy’s digital initiatives, and a road map for action plans.

Acknowledgements


The Digital Strategy team would like to express its gratitude to all of the passionate citizens, external and internal advisory groups, and subject matter experts for their candid and creative input to the process of developing the Digital Strategy.



Digital Current State Overview	7
Consultation	10
Digital Initiative Assessment Model	13
Digital Strategy	14
Digital Maturity	29
A day in the life...	33
Closing Remarks	34




Defining “digital”



A broad range of technology that enables new methods of engagement and service delivery supported by a robust and accessible digital infrastructure and open government ecosystem.



The Vision



Enhance multidirectional digital connections amongst citizens, employees, business, and government.

The pillars of the Digital Strategy

In defining the focus areas of the Digital Strategy, the City looked first to its goals and then to other digital strategies by leading cities including New York and Chicago. Using this lens, 3 pillars were formed that are primarily outward facing – to citizens and businesses – supported by the 4th pillar – focused on the City as a digital organization.

Engagement + Access

How the City and its constituents engage with each other, through transactional service delivery, collaboration and communication. The digital divide is the other aspect of this focus area – access to technology and education to increase digital literacy.

Infrastructure & Assets

Focuses on digital infrastructure and assets.

This includes below and above ground physical assets such as conduit, fibre, and poles.

Digital assets include software, hardware, and data.


Economy

Focuses on the digital economy with respect to supporting growth in the digital sector and enabling all businesses to benefit from digital infrastructure and digital services offered by the City.

Organizational Digital Maturity

This encompasses digital governance, enabling City employees with tools that foster both a digital culture and encourages innovation.

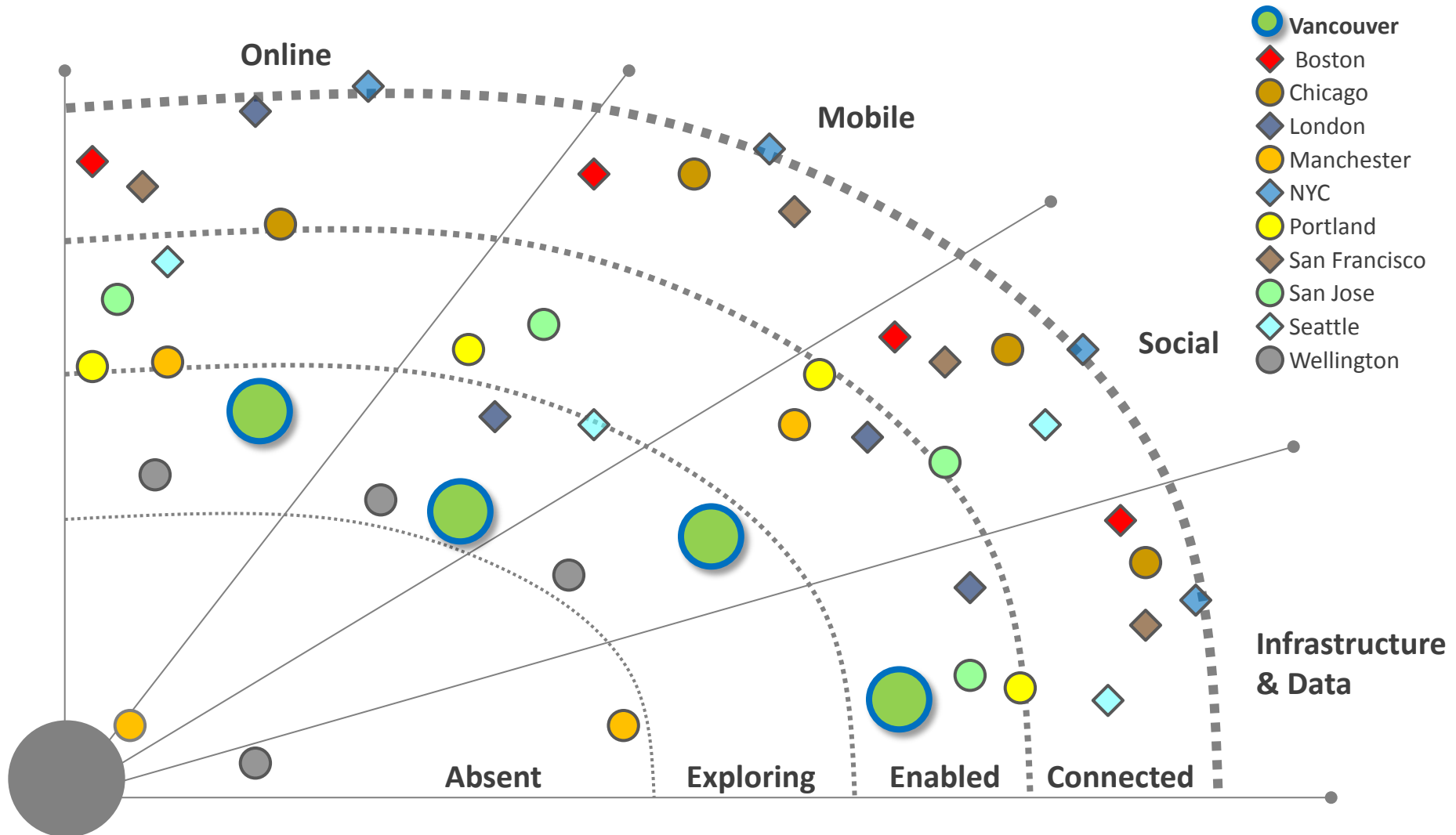
Digital Current State Overview



During October 2012, PwC assessed the City's¹ current state with regards to digital readiness. Based on five digital capability areas (online, mobile, social, infrastructure & assets and organization) measured across four levels of maturity (absent, exploring, enabled and connected), the City of Vancouver's digital maturity was evaluated as moderate, between exploring or enabled.

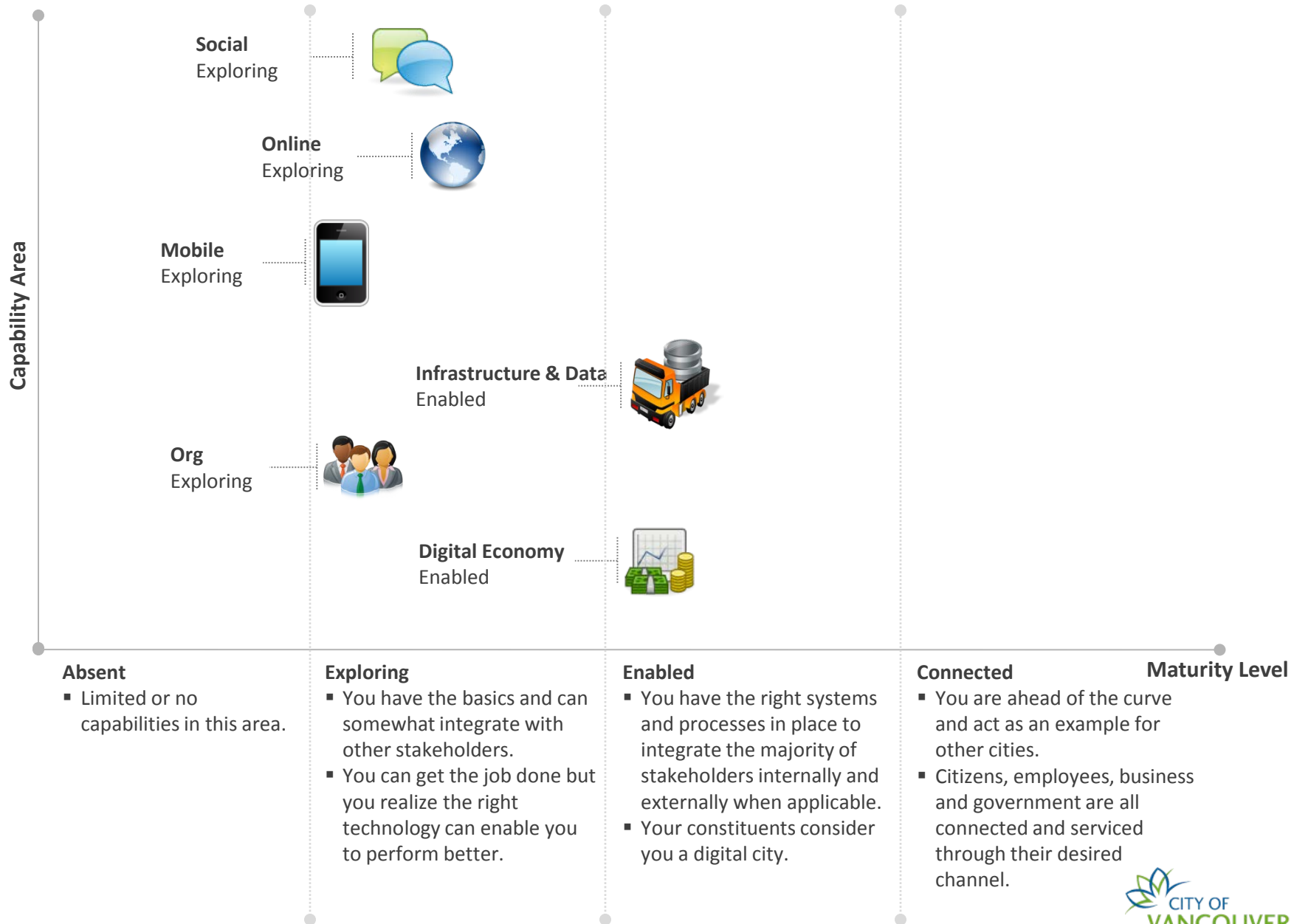
¹ The City as an organization not including the Vancouver Public Library and the Vancouver Police Department

A relative comparison of digital capabilities



1. The analysis was focused on the cities as organizations .
2. Data was not normalized to conduct assessment.
3. Vancouver Public Library or Vancouver Police Department digital readiness was not included in the assessment.
4. Boston, Portland, San Francisco, San Jose, and Seattle were assessed using the PwC capability metrics by the VSR.
5. The assessment was completed in the fall of 2012.

The City's current digital maturity (2012)



Key themes throughout the City's current state

Three key themes emerged from the current state assessment.

Design strategically. Deploy tactically.

- Strong resistance exists within the City to move services to a digital channel without addressing the end-to-end people, process and technology concerns.
- The benefits of digital self-serve are perceived as self-evident. Uncertainty exists, however, regarding self-serve translating into significant benefit. Any new online service must be supported by a channel migration plan to ensure benefits can be achieved.

Empowered employees support empowered citizens.

- Lack of policy is seen as a barrier to participation and innovation.
- Employees want to embrace digital channels more significantly, however, they feel constrained with the lack of resources in people, process and technology.
- Mobile pilots in Parks & Engineering are seen as very successful. It is important to translate these successes to support wider deployment and relevant KPIs.

Digital governance = strategic impact + reduced risk.

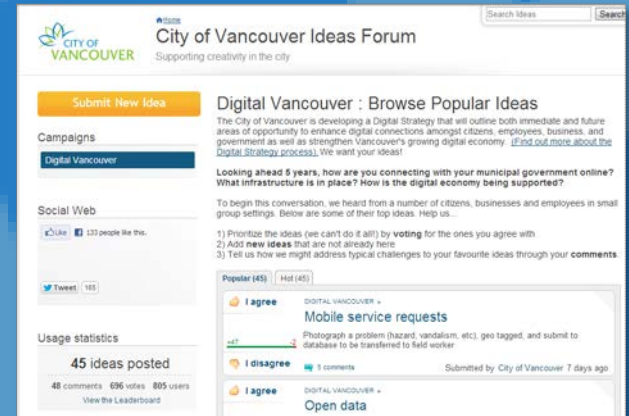
- Need to drive expected benefits and impacts.
- Lack of formalized governance translates into a less cohesive experience across digital channels for all stakeholders.
- Lack of resources and a well-defined strategy prevents further progress.
- Strategies are developed, however, more tactical work and integration is needed.

Consultation



To shape the strategy and Vancouver's digital future, the City spoke with industry insiders, digital thought leaders, start-up founders, students, business executives, citizens and staff and asked them to test, explore, and challenge the ideas behind the Digital Strategy.

They were taken through collaborative design sessions, interviews, focus groups, round tables, and even an online crowd-sourcing exercise, all with the goal of truly evaluating the strategy's principles, priorities, interdependencies, and opportunities. We were also able to leverage a survey of businesses conducted by the VEC in late 2012.



Consultation at a glance



Objectives

1. To test the working definition of the "digital strategy" and **principles** that underpin it.
2. Explore the types of **initiatives** that would be **important** to the various stakeholders.
3. Gain insight into **priorities, inter-dependencies**, and opportunities **for co-design & co-delivery** of digital initiatives.
4. Identify the **challenges** and **opportunities** to access.

Stakeholders



1. External Advisory Group
2. Internal Leaders & Ambassadors
3. Vancouver Economic Commission
4. Infrastructure Providers
5. Business Improvement Associations
6. External Technologists
7. External Service Groups
8. Other Experts

Methods



What we heard during consultation



Key Themes		
External Advisory Group	1. Get moving	
	2. Safe place to fail	
	3. A catalyst for change	
Internal Leaders & Ambassadors	4. Mobile, mobile, mobile	
	5. Seamless interaction with citizens	
	6. Commitment to see the strategy executed	
	Vancouver Public Library	7. The library has the mandate to address education related to the digital divide
		8. Extend library services into the community
		9. The library must keep up with the latest in technology
VEC	10. Use data strategically	
	11. Look beyond the focus on digital media to a broader digital industry and encompass clean tech	
Business Community (VEC Survey Results)	12. Strategic introductions	
	13. More City support	
	14. Going digital	
	15. Keeping it local	

Key Themes	
Infrastructure Providers	16. Free Wi-Fi is not Free Wi-Fi
	17. What is the Win/Win partnership model for digital infrastructure?
	18. Coordinated planning for core network infrastructure
	19. The City as an innovator
BIA	20. Make it easier to do business with the City
	21. Bylaws, zoning and infrastructure
Mayor's Digital Leaders' Meeting	22. A digital neighbourhood
	23. Success stories
	24. The first customer
	External Focus Group
26. More online interaction with the City	
27. The importance of open data	
Ideascale Crowdsourcing	28. Mobile-enabled City services
	29. The importance of open data
	30. City involvement in infrastructure

Considerations for prioritizing the initiatives

- Aligns with citizens needs and priorities
- Aligns with City priorities
- Optimize opportunities for partnerships
- Bases solutions on leading practices in other cities
- Considers investment required to execute
- Has a positive impact on the City's service delivery goals
- Support Open Government initiatives
- Targets the digital divide and advances social inclusion

How did we refine ideas into initiatives?

How we got from 120 to 9.



“The fast pace of digital – the slow pace of government”.

The Digital Strategy

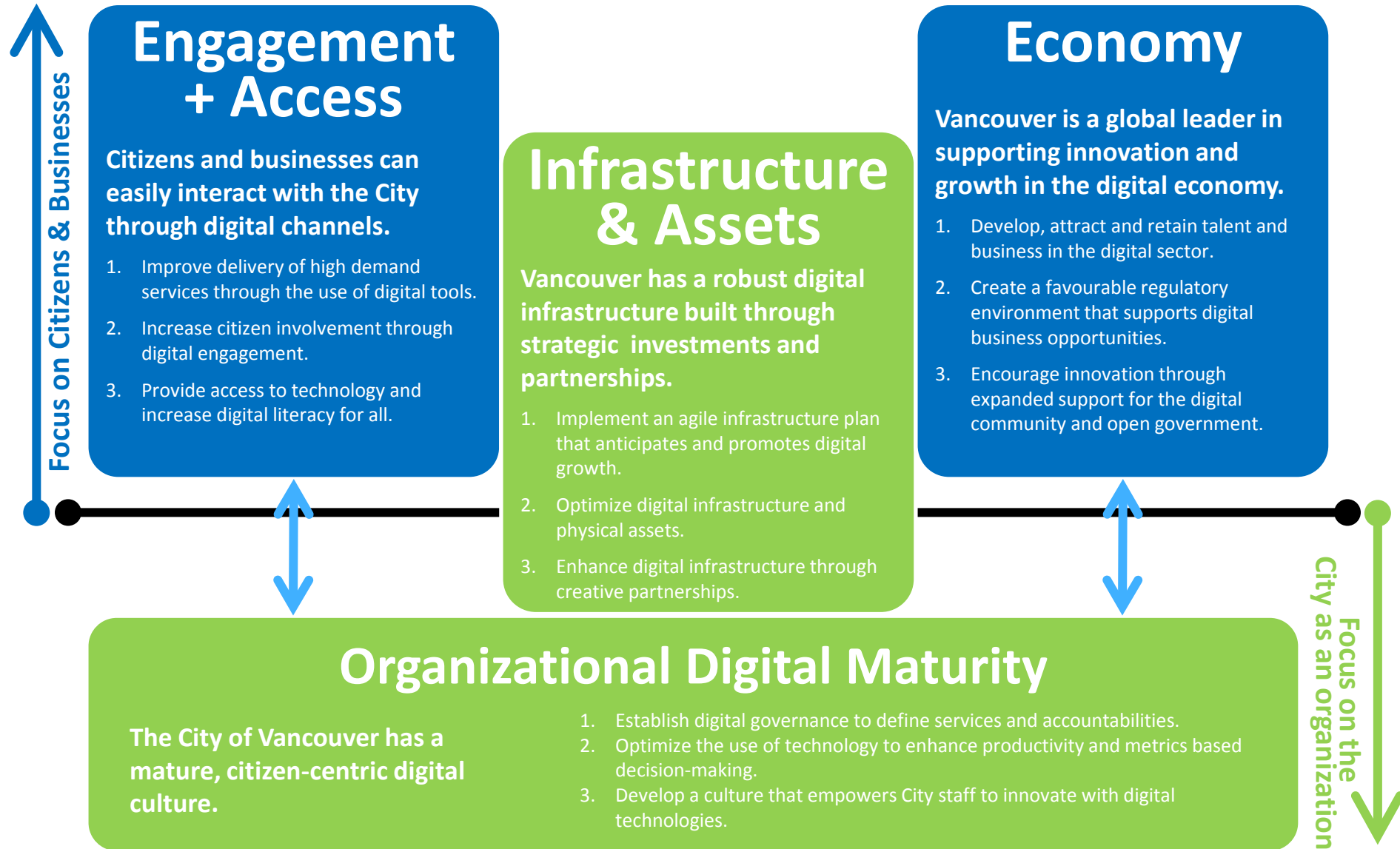


The challenge for Vancouver, and perhaps all cities, is to be more agile under the diametrically opposed pressure of consumer-driven technology adoption and expectations and the increasing need to minimize risk and maximize value.

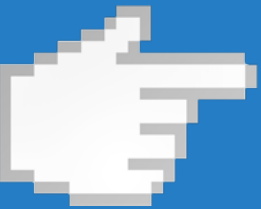
The Digital Strategy sets out a 4 year roadmap that moves Vancouver’s approach to digital from adhoc and sometimes siloed to an integrated and strategic approach that prioritizes key actions which will have the most value for citizens, business and the organization.

A member of the Digital Strategy External Advisory Group coined this phrase as the group was imagining Vancouver’s digital future.

The Digital Strategy goals and objectives



The City sets the pace for digital



When the City first envisioned the digital strategy, a 5-7 year plan was imagined. As the team considered the question of organizational agility and the “fast pace of digital”, a shorter view of the strategy took shape. The initiatives and timelines presented here represent a 4-year plan to move the dial on digital maturity.

Digital initiatives at a glance

Digital Initiative	Actions in progress	Funding
Engagement + Access		
1. Enable City services across digital platforms	✓	●
2. Expand the open data program	✓	●
3. Promote digital activity through communications and engagement tools	✓	●
Infrastructure & Assets		
4. Expand digital access throughout the city	✓	⊙
Economy		
5. Establish a digital incubation program	✓	⊙
6. Create a favourable regulatory environment that supports digital industry	✓	●
7. With community & industry partners, support an agile proof of concept program	✓	⊙
Organizational Digital Maturity		
8. Establish digital services governance	✓	○
9. Implement mobile workforce strategy	✓	●

● - Funded

○ - Funding strategy to be developed

● - Further funding required

⊙ - External funding required

Moving the dial on digital maturity

The digital initiatives identified here represent outcomes that advance the City's goals, and reflect the priorities from the consultation process including input from key advisory groups.

The Digital Strategy revealed that 15 initiatives are necessary in order for Vancouver to reach the desired state of a more digitally 'connected' city.

From those 15 initiatives, 9 were identified as the highest priority based on their ability to accelerate the vision. On the following pages you will find an overview of each of these 9 initiatives.

The remaining initiatives will be executed as opportunities arise or partners emerge.



Engagement + Access

Improve delivery of high demand services through the use of digital tools

Enable City services across digital platforms

A core foundation of any digital city is the delivery of City services through digital channels. In order for the City to continue to engage Vancouver citizens and businesses in the digital age they must develop a larger ecosystem of easily accessible digital content and services. The initial priorities are:

1. Transform permits and licences business model
2. Optimize content on the City's website for mobile devices
3. Replace Park Board's program and event registration software (Safari)
4. Expand to a digital recruitment system integrated with social media

Quick Start:
Launch a
mobile 311
pilot



Engagement + Access

Increase citizen
involvement
through digital
engagement

Enhance the open data program

A cornerstone element of open government is open data. Leading global public sector digital strategies see open data as critical. Vancouver's Open Data Program was initiated in 2009. Since then, over 140 open data sets have been published. However, the initiative hasn't necessarily translated into real benefit to the City. Priority next steps are:

1. Identify key City problems that could be resolved by open data and/or open API solutions
2. Embrace open APIs into open data
3. Support the open data community through an online forum where new data sets, ideas, visualizations and proof of concepts can be discussed
4. Establish priority for ongoing release

Quick Start:
Adopt a formal
standard and
process for
requesting data
sets



3

Engagement + Access

Increase citizen involvement through digital engagement

Promote digital activity through communications and engagement tools

Communications and engagement activities will be designed to promote and encourage residents, businesses and employees to use digital technologies in order to communicate with the City. Beyond this, these activities will also help the City to more accurately track civic engagement in order to deliver better customer service.

1. Launch a social media strategy which includes an enterprise monitoring tool
2. Finalize standards for online community engagement
3. Establish Digital Citizen's Advisory Committee
4. Establish an online community engagement panel



Quick start:
Launch
@covengage
on Twitter



4

Infrastructure & Assets

Optimize digital infrastructure and physical assets

Expand digital access throughout the city

Wi-Fi, a fundamental aspect of any digital city, is expected by citizens. The Vancouver Public Library has provided free public Wi-Fi in all locations since 2007. More recently, public Wi-Fi has been provided at City Hall. Priorities are:

1. Implement Wi-Fi across Vancouver in designated areas (e.g. Granville Mall Wi-Fi pilot) and expand public Wi-Fi in select City facilities
2. Extend Wi-Fi access to staff across priority City facilities

Quick start:
Execute
Wi-Fi pilots in
key
destination
areas



Economy

Develop, attract and retain talent and business in the digital sector

Establish an incubation program for digital companies

Strengthened by a strong digital infrastructure and the proposed digital district, a digital incubator will encourage digital talent to stay and/or locate in Vancouver and support digital-based social innovation.

1. Find a partner to operate the incubator
2. Promote incubator to digital start-ups
3. Launch program

Quick start:
Find a partner to operate incubator



6

Economy

Create a favourable regulatory environment that supports digital business opportunities

Create a favourable regulatory environment that supports digital industry

Vancouver has always been a leader when it comes to innovative policies designed to support both the City and the economy, such as the agreement with Urban Networks. However, the City's current regulatory environment does not encourage the digital industry to establish their businesses in the city. This initiative will focus on removing the impediments in choosing Vancouver as *the* place to do business in digital.

1. Enable supporting infrastructure and review zoning bylaws to remove or minimize impediments to digital clusters districts
2. Support external community demand for access to City infrastructure, such as poles and light fixtures

Quick start:
Redefine the
legal
description for
Digital
Industry



Economy

Create a favourable regulatory environment that supports digital business opportunities

With partners, support an agile proof of concept program

Quick start:
Establish a framework for PoCs

The goal is to develop a proof of concept (PoC) program to allow digital entrepreneurs to utilize municipal asset(s) or infrastructure to demonstrate innovation in our local digital economy. The program will represent a partnership between the community (including higher educational institutions), industry partners and the City.

1. Establish a framework for PoCs to demonstrate innovation within the community
2. Identify partners that can assist with implementation and evaluation of the program
3. Conduct a pilot PoC to test the framework and monitoring process



Organizational Digital Maturity

Establish digital governance to define services and accountabilities

Establish digital services governance

The digital strategy has a broad mandate that will impact citizens, businesses, employees and government. We need coherent leadership and operational oversight and alignment. A recent Gartner report predicted that 25% of all companies would have a digital executive within the next two years. Priorities for the City are:

1. Identify a dedicated cross-department digital services team
2. Assign accountabilities and responsibilities for key digital initiatives
3. Identify digital skills training needed for staff

Quick start:
Establish the digital services portfolio



9

Organizational Digital Maturity

Develop a culture that empowers City staff to innovate with digital technologies

Implement mobile workforce strategy

The City must be able to provide the foundation for its employees to become empowered through use of consumer-driven mobile technologies in combination with secure enterprise technologies. By enabling the mobile workforce, the City will realize increased efficiencies while simultaneously encouraging innovation by employees.

1. Trial a secure mobile device management platform
2. Align employee role and work requirements with mobile device provisioning.

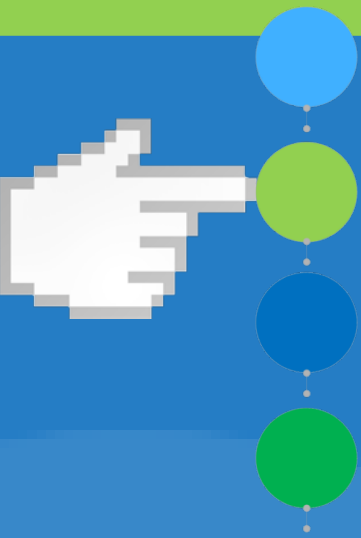
Quick start:
Align role
with devices

Closing the gap on the digital divide

- Only 54% of households with incomes of \$30,000 or less have home Internet access compared to 97% of households with incomes of more than \$87,000¹
- The City of Vancouver has already made a significant investment in addressing the digital divide through the Vancouver Public Library (VPL)
- VPL has 22 locations across the city, providing more than 400 computers with Internet connectivity and office software and more than 100 additional that computers connect to subscription e-resources and government information
- Engaging, learning and working in today's digital world calls for new skills and new competencies – all supported through free computer and technology classes at VPL

Statistics Canada describes the digital divide as “the gap between Information and Communications Technology (ICT) ‘haves’ and ‘have-nots’, [using it] as an umbrella term for many issues, including infrastructure and access to ICTs, use and impediments to use, and the crucial role of ICT literacy and skills to function in an information society.” (Sciadas, G. *Digital Divide in Canada*. Statistics Canada, 2001).

Additional key actions



While the priority for the City over the next 4 years is focused on the preceding 9 initiatives, there are additional key projects and actions that will need to be pursued as funding becomes available and partners emerge in order to more substantially move the dial on digital maturity.

Additional actions to be pursued

Engagement + Access

- Expand the Vancouver Public Library digital literacy program
- Continue to prepare for and create opportunity for online voting

Infrastructure & Assets

- Continue to evolve the City's digital infrastructure strategy

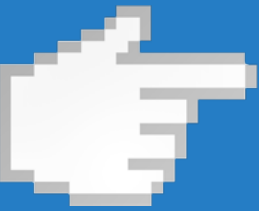
Economy

- Through VEC, continue to foster digital talent strategy

Organizational Digital Maturity

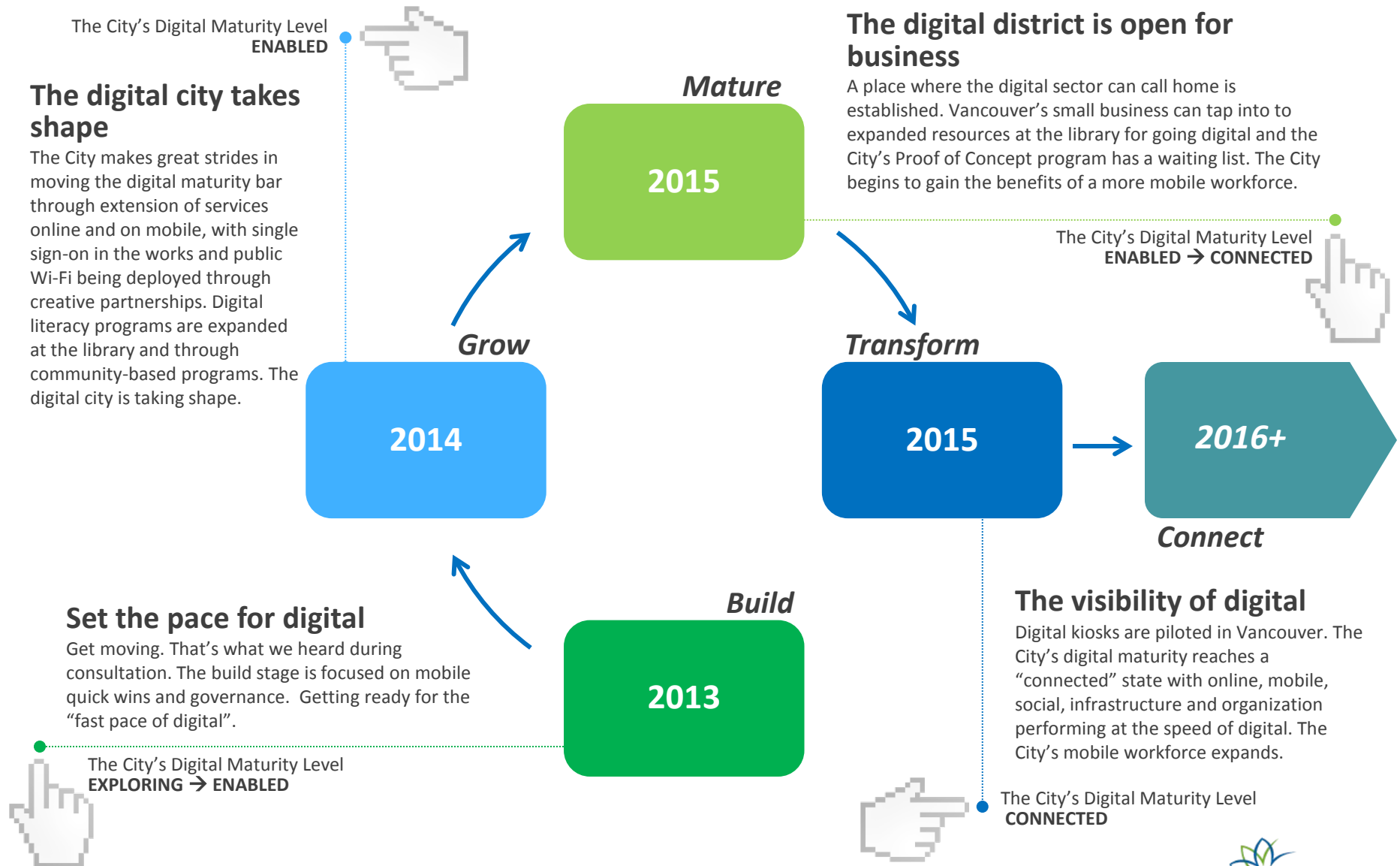
- Work towards an enterprise portal
- Develop the City's digital workforce

Moving the dial on digital maturity

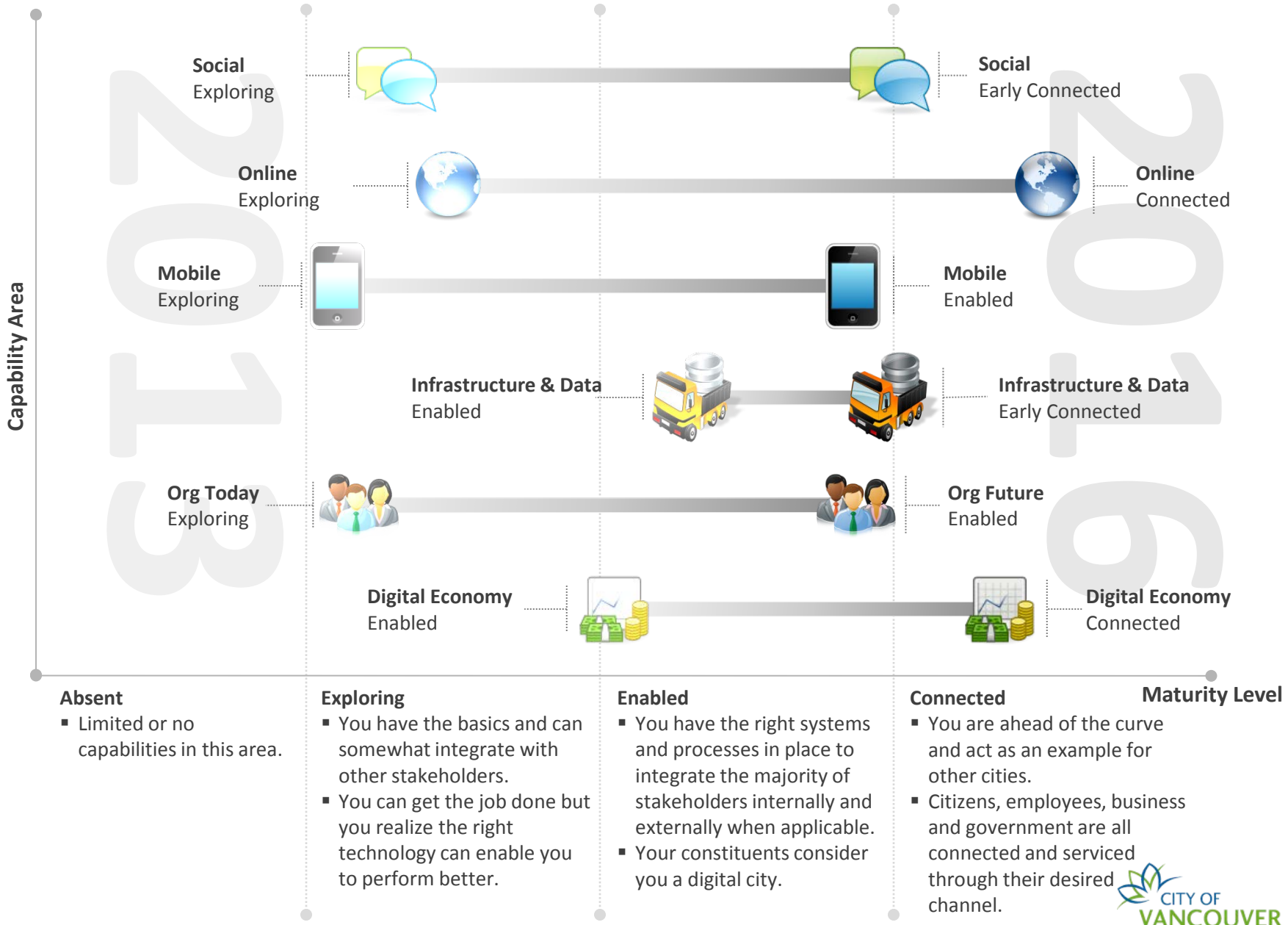


The 4-year plan calls for outcomes that will increase the City's digital maturity across all capability areas – online, social, mobile, infrastructure & data, organization and digital economy.

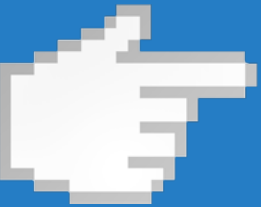
The road to digital maturity



The digital maturity outlook for the City as an organization



A day in the life ...

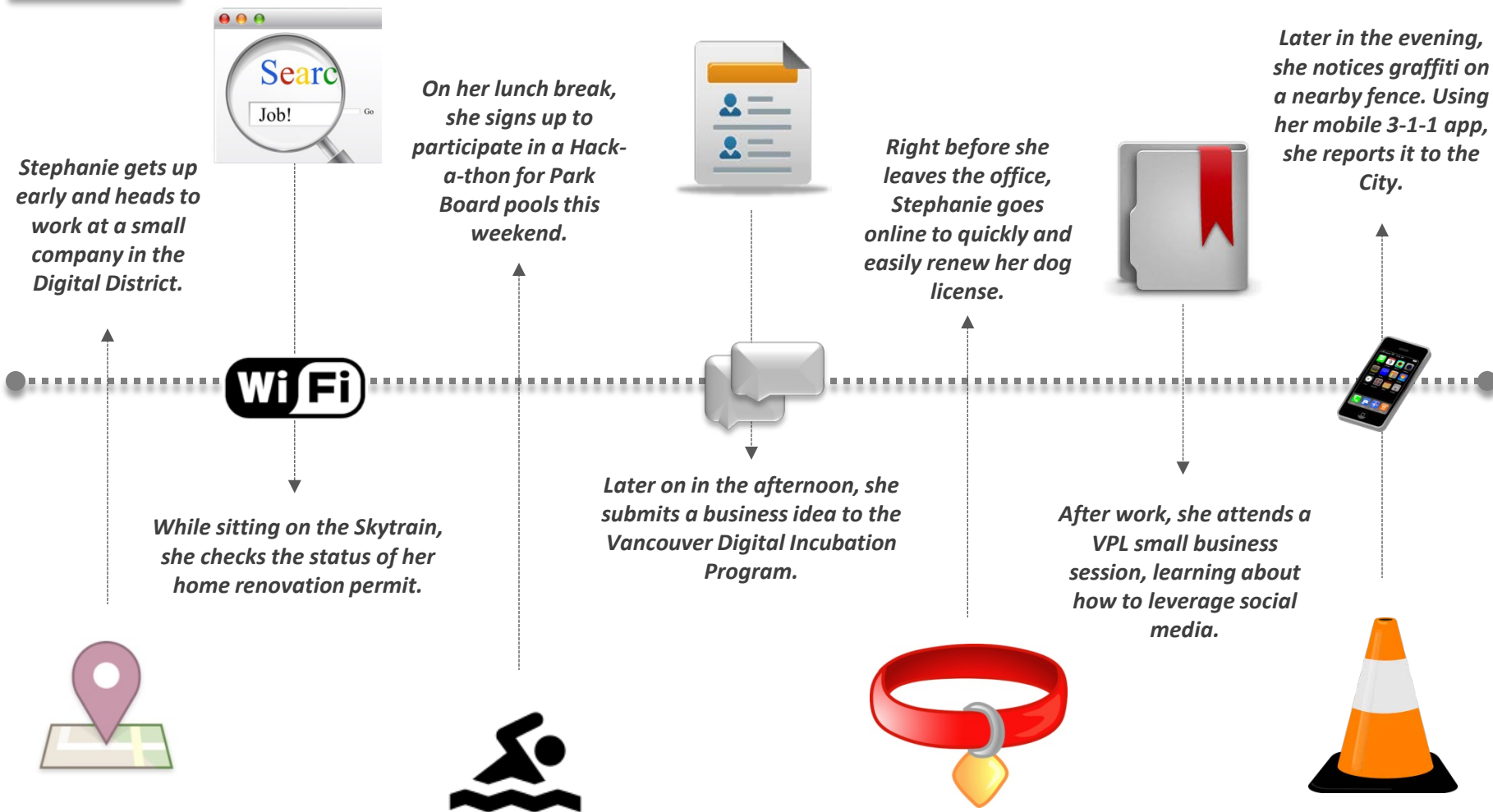


Throughout the consultation and visioning process, the digital strategy team used “A day in the life ...” approach to envision what a digital Vancouver could be. With the initiatives outlined in the strategy, what does a day in the life of a digital citizen in Vancouver look like in 2016?

The new day in the life of a Vancouver citizen



Meet Stephanie, a working professional. She is well educated, works long hours, and has little free time. While she frequently uses digital media, she is actually looking for the easiest, most efficient means of communication. Her touch points with the City are via social media, mobile apps, the website, and email.



In closing



Forrester, a well-regarded technology research company, has called 2013 “The Year of Digital Business”. The digital strategy and its initiatives comprise a significant commitment by the City to execute. In choosing priorities the City has balanced the desire to move quickly with what is truly achievable, while remembering what was echoed during consultation – “***We can’t not be ambitious***”.