Ⓒreative Industries Development Strategy

Propelling Singapore's Creative Economy

CONTENT PAGE

THE RISE OF THE CREATIVE ECONOMY

Globalisation, technology and competition are changing the global environment rapidly. Singapore must now embark on a journey of reinvention to harness the multi-dimensional creativity of our people to develop a Creative Economy. This would require us to look at how we can fuse arts, business and technology to become Singapore's new competitive advantage.
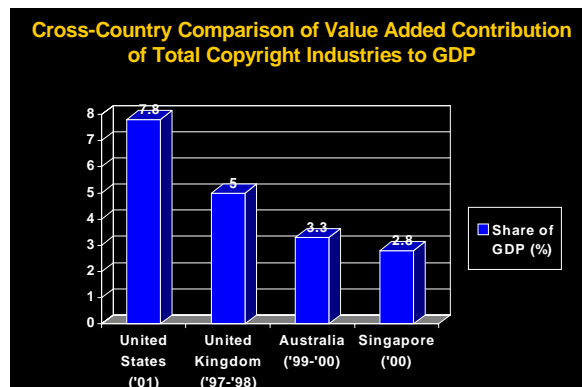
The creative cluster is a key contributor to the Creative Economy and can be defined as "those industries which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property"[1]. For the purpose of this report, we have categorised the creative industries into three broad groups:

- **Arts and Culture**
  - Performing arts, visual arts, literary arts, photography, crafts, libraries, museums, galleries, archives, auctions, impresarios, heritage sites, performing arts sites, festivals and arts supporting enterprises
- **Design**
  - Advertising, architecture, web and software, graphics, industrial product, fashion, communications, interior and environmental
- **Media**
  - Broadcast (including radio, television and cable), digital media (including software and computer services), film and video, recorded music and publishing

The creative cluster cuts across multiple economic sectors and does not constitute a cohesive or discrete sector in the traditional sense of an industry cluster. Hence, it has not, until recently, been recognised as a cluster in itself, requiring policy co-ordination and investment.

STATE OF THE CREATIVE CLUSTER

The current value of the creative cluster in Singapore has been estimated to be between 2.8% to 3.2% of Gross Domestic Product (GDP). This is lower than US (7.8%), UK (5%) and Australia (3.3%). In all the surveyed countries, the creative cluster is growing at a higher rate than that of the overall economy. Notably, the US and UK growth rates have accelerated to 3 – 5 times that of the overall economy in recent years.

Cross-Country Comparison of Value Added Contribution of Total Copyright Industries to GDP

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[1] UK Creative Industries Taskforce, *Creative Industries Mapping Document,* November 1998.

In Singapore, the creative cluster employs some 72,000 employees in 8,000 establishments. The value-added of the total copyright industries expanded significantly from $0.8 billion in 1986 to $4.8 billion in 2000, representing a compound annual growth rate (CAGR) of 13.4%, as compared to the overall economy's CAGR of 10.6% over the same period. As a result, the economic importance of the copyright industries relative to the whole economy improved from 2.0% of GDP in 1986 to 2.8% in 2000. Employment in the copyright industries also grew at a faster rate than that of the overall economy. Total copyright employment rose from 30,700 in 1986 to 72,200 in 2000, registering a CAGR of 6.3% vis-à-vis 3.8% for the overall economy.

SWOT ANALYSIS

Strengths
- Strong supporting factors such as good IT and telecommunications infrastructure, our reputation as a regional financial hub and stable governance, etc, stand Singapore in good stead to develop our creative industries.
- Being a multi-cultural society with a bilingual policy, Singapore has the potential to target a wide range of language markets
- Our cosmopolitan and well-educated population can serve as a test-bed for innovative products and services
- The Government has already invested more than $1 billion in developing world-class arts and cultural infrastructure

Weaknesses
- Singapore's limited local market size means that industry growth will have to be driven by an export-driven approach targeting global markets
- The lack of financing options for creative industries limits industry growth
- Lagging investments in software versus hardware have resulted in a shortage of skilled creative manpower and culturally savvy audiences
- The high business costs in Singapore puts off potential investors
- The relatively low level of private sector partnership and sponsorship for arts and cultural events in Singapore limits the growth and vibrancy of our arts and cultural scene
- The perception of Singapore as a highly-regulated place, which is not conducive for creative experimentation, could deter global creative talents and companies from using Singapore as a 'work-live-play' base

Opportunities
- Our proximity to Asia's huge market provides a ready consumer base and access to a vast wealth of creative resources
- Singapore is well-placed to exploit niche areas such as New Asia or Fusion lifestyle and entertainment products and services
- The global media industry is growing rapidly, with a projected annual growth of 5.2% from US$1 trillion in 2001 to US$1.4 trillion in 2006
- Cultural tourism is also expected to become an increasingly important source of revenue, with a projected global growth rate of 15% per year

Threats
- There is <u>intensifying international competition</u> to develop the creative cluster as a sustainable engine of growth for the economy
- These competitors will engage in a <u>war for creative talent (and enterprises)</u> with Singapore

VISION

Our vision is to develop a **vibrant and sustainable creative cluster to propel the growth of Singapore's Creative Economy**. The creative cluster not only generates economic value directly, it is also an economy-wide enabler that helps to drive innovation and differentiate our products and services.

Targets for 2012 include:

- **Double % GDP contribution** of the creative cluster from an estimated 3% in 2000 to 6% in 2012; and

- Establish a reputation for Singapore as a **New Asia Creative Hub**.

The industry-specific visions are to develop Singapore into:

- "A **Renaissance City** – a highly innovative and multi-talented global city for arts and culture" [*Renaissance City 2.0*]

- "A **Global Cultural and Business Hub for the Design** of products, content and services, where design consciousness and creativity permeates all aspects of work, home and recreation" [*Design Singapore*]

- "A **Global Media City** with a thriving media ecosystem rooted in Singapore with strong international extensions" [*Media 21*]

STRATEGIC THRUSTS AND KEY RECOMMENDATIONS

Each of the three chapters on Renaissance City 2.0, Design Singapore and Media 21 is a self-contained writeup on the strategies and recommendations that address industry-specific needs. A complete summary of these strategies and recommendations is enclosed on ***pg viii***. This executive summary will highlight some of the key recommendations to develop and deploy Singapore's creative and cultural assets.

BUILD CREATIVE CAPABILITIES

- **Embed Arts, Design and Media within All Levels of Education**

To enhance the creative capacity of our people, arts, design and media can be embedded as creative learning tools for all levels of education. For example, drama and literature could be employed to help students enhance their language abilities

while multi-media tools can help students approach science and maths projects in an innovative manner. To this end, Singapore would also need passionate teachers who are skilful in weaving arts, design and media into the education curriculum to help their students learn and think more broadly and creatively.

- **Establish a Flagship Art, Design and Media University Programme**[2]

To build up Singapore's stock of creative experts, it is recommended that a flagship art, design and media university programme be developed at the proposed NUS-X campus, in collaboration with leading institutions such as the Royal College of Art (London), University of Art and Design (Helsinki), and Pasedena Art Centre (Los Angeles). This new School of Art, Design and Media could differentiate itself by offering a broad-based and research-oriented curriculum.

- **Establish a MediaLab in Singapore**

To nurture multidisciplinary researchers of the highest calibre, it is recommended that Singapore establish a Media Lab with partners such as MIT MediaLab to conduct research on innovative applications, services and devices. Singapore will benefit immensely from the knowledge transfer and collaborative exchanges with global researchers.

STIMULATE SOPHISTICATED DEMAND

- **Government as Catalyst**

It is proposed that the Government play a catalytic role to develop the creative industries by stimulating sophisticated demand. For example, it could support the "Percent-for-the-Arts" scheme (see below) as well as support the use of effective design in its public amenities, services and spaces.

- **Establish a "Percent-for-the-Arts" Scheme to Promote Public Art**

Through the inclusion of artworks in public spaces, we can widen people's exposure to, and appreciation of arts and its relevance in everyday life. It is recommended that Singapore establish a "Percent-for-the-Arts" scheme to promote the development of public art in Singapore. One-North will prototype this scheme, which should eventually be made mandatory for all public sector agencies. Private sector companies could be incentivised through tax exemption, or even double tax deduction, to participate in the scheme.

- **Work with CDCs to Develop "Creative Towns"** [3]

It is recommended that a 'Creative Town' initiative be piloted with a selected township. The Town will serve as a developmental model for a vibrant, creative, culturally rich, entrepreneurial and technologically savvy community. This prototype can be fine-tuned and, eventually, adopted by the rest of the Community Development Councils (CDCs) to evolve a Creative and Connected Singapore. The

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[2] This proposal could complement the 1998 Report of the Committee to Upgrade LASALLE-SIA and NAFA, which recommended that the two schools be allowed to award NUS degrees in the visual arts at the end of 5 years if they meet the necessary standards as agreed by the Arts Education Council.

[3] The Mayors' Committee Meeting endorsed the Creative Town proposal on 19 August 2002. A multi-agency taskforce involving private, public and people sectors is being set up to prototype the Creative Town concept at a selected township.

Creative Town concept should focus on unleashing the latent creativity and passion of individuals by integrating arts, culture, design, business and technology into community planning and revitalisation efforts. Features of a Creative Town could include the "Percent-for-the-Art" Scheme, fusion spaces, entrepreneurship training programmes, creative thinking courses, cultural events and festivals, etc.

▪ **Develop a New Museum of Modern and Contemporary Art**
In the longer term, it is recommended that Singapore develop a Museum of Modern and Contemporary Art (MoMCA) that focuses on showcasing international modern and contemporary modern artworks and design. This would strengthen Singapore's standing as a global city for arts and culture. MoMCA has the potential to replicate the phenomenal successes of Tate Modern and Guggenheim Bilbao in generating economic spinoffs and tourism dollars.

DEVELOP CREATIVE INDUSTRIES

▪ **Develop Mediapolis @ one-north**
To strengthen and heighten the visibility of Singapore's efforts in developing our media industry, it is recommended that a state-of-the-art media city be developed at one-north. This Mediapolis will cluster high value-adding media production and R&D activities in a conducive "work, live, play and learn" environment that supports experimentation and multidisciplinary cross-pollination.

▪ **Position Singapore as a Media Exchange**
The development of Singapore into a financing and trading exchange hub for media will enable us to gain a strategic foothold into the creation, acquisition and exploitation of media copyrights. There would also be economic spinoffs benefiting our local media industry (production and post-production) and other sectors of the economy such as hospitality, finance and law. Specific proposals include:
(i)   Introduce tax incentives for investments in core media copyrights;
(ii)   Co-establish a Media Loan Fund with private companies;
(iii)   Attract venture capitalists and media finance companies;
(iv)   Establish a registry of media copyrights; and
(v)   Grow media markets@Singapore

▪ **Export Made-by-Singapore content**
Singapore's content development efforts have traditionally been constrained by a small domestic market. It is recommended that additional emphasis be placed on developing content for export through collaborations with foreign talent and partners. This can leverage on a Content Development Fund and be supported by initiatives to increase bilateral co-production agreements and enhance export promotion. Niche areas must be identified to capitalise on Singapore's strengths in multi-lingual content, education, business, finance and IT. Professional talent across the value chain must be augmented to meet worldclass standards.

▪ **Establish a National Design Council**
Design has emerged as a key driver of enterprise and national competitiveness. To enable Singapore to create new value through design, there is a need for a central organisation at the national level to champion the design cluster and synergise the

activities and concerns of the various players. It is recommended that a national agency for design be set up with representation at the highest level for industry, the design community, education institutions and the public sector. Such an agency would also allow Singapore to tap into the international design network, which comprises other national design councils and organisations. This agency would therefore be positioned to (a) forge links as the one-stop contact for design locally and internationally; (b) nurture the local design industry; and (c) champion design excellence in Singapore.

- **Promote Arts and Cultural Entrepreneurship**

In order to unleash the economic value of our arts and cultural resources, it is recommended that we promote arts and cultural entrepreneurship in the following areas:
- Promote <u>Information as Business</u> in Singapore by helping to develop the research and publishing competencies of local information enterprises
- <u>Global Knowledge Concierge Service</u>
- <u>Art, heritage and library consultancy services</u>
- <u>Cultural tourism in Singapore and the region</u>
- <u>Development of creative industries</u> such as design, recording music, publishing, and arts supporting industries etc.
- <u>Merchandising</u> capitalising on Singapore's wealth of heritage resources

A NATIONAL COLLABORATIVE APPROACH

To develop Singapore's creative cluster, a national concerted approach must be adopted to involve all players with vested interests. This would include stakeholders in the private, public and people sectors. MITA could be tasked to spearhead the co-ordination and development of the creative cluster, whilst garnering support from other stakeholders in a Singapore Inc. manner.

SUMMARY OF RECOMMENDATIONS

RENAISSANCE CITY 2.0

Strategy 1: Build Creative Capabilities	
1.1	Embed Arts, Design and Media within All Levels of Education
1.2	Establish a Flagship Art, Design and Media University Programme
Strategy 2: Stimulate Sophisticated Demand	
2.1	Establish a "Percent-for-the-Arts" Scheme to Promote Public Art
2.2	Develop Fusion Library Space for the People
2.3	Work with CDCs to Develop "Creative Towns"
2.4	Develop a Virtual Cultural Resource Network
2.5	Transform Singapore Art Series into Singapore Biennale to Enhance Singapore's International Profile
2.6	Develop a New Museum of Modern and Contemporary Art
Strategy 3: Develop Creative Industries	
3.1	Promote Arts and Cultural Entrepreneurship - MITA agencies to work with Singapore Tourism Board to develop cultural tourism - National Arts Council to develop arts and design industries - National Heritage Board to exploit Singapore's wealth of heritage resources to go into merchandising and arts and heritage consultancy - National Library Board to venture into global knowledge concierge service, develop the information services sector and provide library consultancy services

DESIGN SINGAPORE

Strategy 1: Integrate Design in Enterprise	
1.1	Identify and Develop Iconic Singapore products and Services
1.2	Promote Design in the Public Sector
1.3	Raise Business Awareness of Design Excellence
1.4	Facilitate Use of Design by Businesses
Strategy 2: Develop a Vibrant & Professional Design Community	
2.1	Establish a Flagship University Program in Art, Media and Design
2.2	Enhance Design Education in Secondary Schools, Polytechnics & Arts Schools
2.3	Establish Design Testbeds
2.4	Enhance Professional Standing of Designers
Strategy 3: Position Singapore as a Global Design Hub	
3.1	Establish a National Design Council
3.2	Anchor International Design Companies and Activities in Singapore
3.3	A National Marketing and Branding Strategy
Strategy 4: Foster a Design Culture & Awareness	
4.1	Embed Design in All Levels of Education
4.2	Bring Design Everywhere
4.3	Design in the Mass Media

MEDIA 21

Strategy 1: Develop a Media City in Singapore	
1.1	Develop Mediapolis @ One North
1.2	Enhance Applied Research in Digital Media
1.3	Specialise in Digital Post-Production
1.4	Expedite National Deployment of Digital Media Services
Strategy 2: Position Singapore as a Media Exchange	
2.1	Introduce Tax Incentives to Attract Media Investments
2.2	Establish a Loan Fund for Copyrighted Media Materials
2.3	Attract Media Finance Companies and VCs
2.4	Create and Manage a Registry of Media Copyrights
2.5	Grow Media Markets @ Singapore
Strategy 3: Export Made-by-Singapore Content	
3.1	Establish a Content Development Fund
3.2	Develop Niche Genres
3.3	Increase Bilateral Co-Production Agreements
3.4	Increase Exports Promotion
Strategy 4: Augment the Media Talent Pool	
4.1	Establish a Media Academy
4.2	Enhance Specialist Skills
4.3	Create Opportunities for Exposure to World's Best
4.4	Embed Media Training into School Curricula
4.5	Enhance Knowledge of Intellectual Property Rights
Strategy 5: Foster a Conducive Regulatory Environment and Culture	
5.1	Ensure Policies and Procedures meet International Best Practices
5.2	Ensure Regulatory Consistency and Clarity
5.3	Facilitate a Production-Friendly Environment
5.4	Encourage Industry Responsibility and Responsiveness
5.5	Increase Public Education and Empowerment

A NATIONAL COLLABORATIVE STRATEGY

The national strategy to develop the creative cluster will involve partners in the private, public and people sectors to:

- Raise awareness of the economic potential of the creative cluster;
- Define and measure the economic impact of the creative cluster in Singapore;
- Research on key issues and challenges;
- Formulate, promote and implement policies and programmes in a holistic manner; and
- Promote dialogue and exchange among stakeholders and industry players within and beyond Singapore.

CHAPTER ONE:
THE RISE OF THE CREATIVE CLUSTER

INTRODUCTION

Over the past four decades, Singapore has focussed much of its energy on strengthening its economic fundamentals. Its investment-led economic strategy has made it a dynamic and prosperous nation. However, globalisation, technology and competition are changing the global environment rapidly. The factors for success in the past can no longer apply. We have moved from the Information Economy to the Creative Economy, which exploits the knowledge, imagination and passion of individuals to create extraordinary value and wealth. The greatest resource of a nation is now the creative capacity of its people.

> "For many years, we concentrated on the economic side. But if you want the economic side to flourish, you need more entrepreneurs, you need more creativity. So, you must also look at the arts. The two must go together."
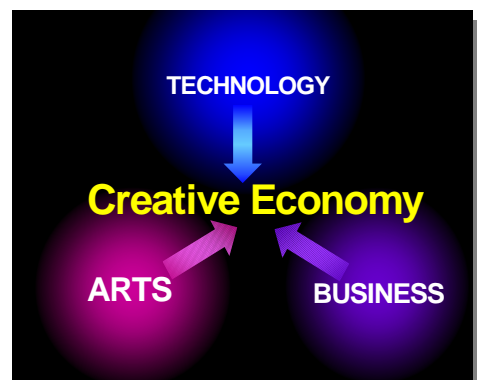>
> *Prime Minister Goh Chok Tong*
> *Asia News Network, May 2002*

> *Creativity*
> Definition – "the ability to create meaningful new forms"
> *Webster's dictionary*

Prof Richard Florida, a regional economic development professor at Carnegie Mellon University argues that creativity is multidimensional[1]. The varied forms of creativity that we typically see as different from one another – technological creativity (or invention), economic creativity (or entrepreneurship) and artistic and cultural creativity – are in fact deeply interrelated. Not only do they share a common thought process, they reinforce each other through cross-fertilisation and mutual stimulation. Throughout history, practitioners of different forms of creativity have tended to congregate and feed off each other in teeming, multifaceted creative centers - Florence in the early Renaissance; Vienna in the late 1800s and early 1900s; and the many fast growing creative centres across the United States today, such as San Francisco and Boston.

This is why Singapore must embark on a journey of reinvention to look into how we can harness the multi-dimensional creativity of our people to become our new competitive advantage. This would entail a fundamental shift in the way people think about the link between the arts and economic growth. The fusion of arts with business and technology gives rise to exciting new possibilities in developing a Creative Economy to propel the economic growth of our nation.

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[1] The Rise of the Creative Class – and how it's transforming work, leisure, community and everyday life, Richard Florida, Published by Basic Books, 2002.

DEFINING TERMS

The creative cluster is a key contributor to the Creative Economy and can be defined as "those industries which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property".[2] These creative industries directly or indirectly produce cultural products and include not only commercial enterprises but also artists, public and non-profit organisations. Unified by the thread of cultural creativity, the creative cluster cuts across multiple economic sectors and does not constitute a cohesive or discrete sector in the traditional sense of an industry cluster. Hence, it has not, until recently, been recognised as a cluster in itself, requiring policy co-ordination and investment.

For the purpose of this discussion, we have categorised the creative industries into three broad groups:
- Arts and Culture
  - Performing arts, visual arts, literary arts, photography, crafts, libraries, museums, galleries, archives, auctions, impresarios, heritage sites, performing arts sites, festivals and arts supporting enterprises
- Design
  - Advertising, architecture, web and software, graphics, industrial product, fashion, communications, interior and environmental
- Media
  - Broadcast (inc radio, television and cable), digital media (inc software and computer services), film and video, recorded music and publishing

THE CONTRIBUTIONS OF THE CREATIVE ECONOMY

The Green Paper on "*Investing in Cultural Capital – A New Agenda for a Creative and Connected Nation*" drafted in March 2002 by the Cultural Agenda Taskforce comprising representatives from MITA, STB, EDB and MOM, provides detailed arguments and case studies on how the creative cluster benefits the economy and society (*Annex 1.1*). Some of the key ideas are summarised below:

National Competitiveness

- Direct GDP Contribution of the Creative Cluster

As we will show in the section on "The State of the Creative Economy", the creative cluster has tremendous growth potential in terms of GDP contribution, exports and job creation.

- Economic Revitalisation and Spinoffs

The creative cluster also generates significant economic spin-offs. In 1998, the multipliers for arts and cultural activities and design industries in Singapore were estimated to be 1.66 and 1.76 respectively. This was higher than 1.4 for the banking sector and 1.35 for the petrochemical sector. McKinsey[3] further validated that the arts and culture are an attractive public investment for states, communities and countries: the yields are high, the risks low and opportunities sizable. Strategic investors, who focus on the long-term outlook for an investment, will be impressed by the way that arts institutions can create jobs and serve as the core of economic as well as community revitalisation plans. For example, the Guggenheim Museum in

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[2] UK Creative Industries Taskforce, *Creative Industries Mapping Document,* November 1998.
[3] Arts for more than art's sake (Connecticut: McKinsey & Company, 2001).

Bilbao, Spain, boosted the local tourism industry with 2.6 million visitors in its first two years of operation and created over 8,000 jobs since 1997.

- ▪ Differentiating products and services across all sectors of the economy

The creative cluster can also be understood to have a critical impact on products and services outside the immediate cluster of creative industries. Technological innovation and keen competition have led to affordability and unprecedented access to new products and services. Today's winners derive their competitive edge from fusing technological innovation with product design, branding and marketing. Successful companies such as Sony, Samsung, Swatch, Apple and Nokia see design as a matchless opportunity to differentiate their products, and to build a gateway to the global marketplace where consumer needs and desires have become more sophisticated.

Attractiveness and International Image of Singapore

A vibrant creative cluster adds to the attractiveness of Singapore to global talent and businesses by raising the quality of life, contributing to a culture of pervasive innovation and raising the international profile of Singapore.

Creative People

The creative cluster can also enhance the development of our human capital. It offers new possibilities for our people to realise their diverse aspirations. Educators have also observed that students develop creative thinking through the arts and transfer that capacity to other subjects. When the arts are a strong component of the school environment, students achieve higher grades and better scores on standardised tests such as SAT, while demonstrating lower drop-out rates and absenteeism[4]. An arts education can also build specific skills that the business world values, such as goal setting, flexible thinking, tolerance, co-operation and teamwork, creative problem solving, self-confidence and motivation[5].

Individual Well-Being, National Pride, Community Bonding

Finally, the social value of the creative cluster must not be forgotten. Individual well-being, social capital, common values, national pride and community bonds are all reinforced by participation in cultural activities.

THE GLOBAL RACE TO DEVELOP THE CREATIVE CLUSTER

As the world awakens to the fact that cultural creativity can constitute a powerful economic force when fused with business and technology, there is now a global race to better understand and harness the economic potential of the creative industries at the city, regional and national levels. Just to cite a few examples, the UK, US, Europe, Hong Kong and Korea have all invested significant time and energy to define, measure and develop their creative industries. Some of their newest developments are summarised at *Table 1*.

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[4] Creativity, Culture, Education and the Workforce. (Issue Brief for "Art, Culture & the National Agenda" project by Centre for Arts and Culture, US, December 2001)
[5] Educating for the Workplace Through the Arts". A special supplement to Business Week, 1996.

Table 1: Summary Table of International Activities to Develop Creative Industries (Not Exhaustive).

Country	Highlights of Developments
UK	▪ A **Creative Industries Taskforce** was set up by Prime Minister Tony Blair in 1997 to investigate generic issues which impacted on the creative industries and to make recommendations for change in areas such as skills and training, finance for creative venture, intellectual property rights and export promotion. It provided a forum in which Government Ministers met with leading industry figures to analyse the needs of the creative industries and develop policy across government to ensure their value to the UK economy was sustained and developed. The Taskforce published **Creative Industries Mapping Documents 1998 and 2001**, which identified the activities and economic performance of each creative industry, their potential for growth, and the key barriers to growth. This work is now being carried forward by a **Ministerial Creative Industries Strategy Group**, which serves to ensure a co-ordinated response to the needs of the creative industries, acting as a "clearing house" for initiatives and action. ▪ A £200 million **National Endowment for Science, Technology and the Arts (NESTA)** was set up in July 1998 under the National Lottery Act. Its core objective is to "support and promote talent, innovation and creativity in the fields of science, technology and the arts". NESTA concentrates on individuals and small teams rather than institutions and companies, and helps to promote convergence of the science, technology and the arts by supporting areas that transcend the traditional boundaries.
US	▪ The New England Council is an alliance of businesses, academic and health institutions, and public and private organisations that serves to promote economic growth and a high quality of life in the New England region. It initiated **The Creative Economy initiative** in 1998 to demonstrate the dramatic impact of culture on the region's economy. Following its groundbreaking June 2000 report on "The Role of The Arts and Culture in New England's Economic Competitiveness", it proceeded to release a "Blueprint for Investment for New England's Creative Economy" in June 2001. The blueprint mapped out strategies to develop the creative cluster through policy formulation and program development. ▪ The Centre for Arts and Culture, an independent think tank, produced a series of briefing papers under the project title of "**Art, Culture and the National Agenda**" to highlight the economic and social contributions of the cultural sector and to urge the government to create focal points for cultural policies within the federal government.
Hong Kong	▪ In the pipeline are ambitious plans for an **integrated arts, culture and entertainment district** at a 40-Ha reclaimed site at **West Kowloon**, which will help Hong Kong fulfil its aspiration to be a world-class Events Capital. ▪ The business community has also recognised the economic importance of the arts. The cover story of the June 2002 issue of The Bulletin, a **Hong Kong General Chamber of Commerce** Magazine, focussed on how arts and culture could become an engine of economic growth for Hong Kong.
Korea	Since the late 1990s, Korea has undergone a paradigm shift to recognise the economic value of the cultural industries. This led to the following developments. ▪ Share of total **budget** of Ministry of Culture and Tourism for the cultural industries increased from 3% in 1998 to 16% in 2002. Primary objective of **cultural policies** shifted to focus on promoting the economic potential of domestic culture. A **comprehensive plan for developing skilled cultural workers** was published. ▪ The **Korea Culture & Contents Agency (KOCCA)** was established in 2001 to provide systematic support for the cultural industries. The mission of KOCCA covers the fostering of culture, training skilled manpower, facilitating exports and the establishment of a business infrastructure. Key areas being developed include animation, cartoons, music, characters, games, mobile and internet content. ▪ The Seoul Metropolitan Government is pursuing an ambitious project to develop a 565,000 sq m^2 **Seoul Digital Media City** (SDMC). SDMC is scheduled for completion in 2010 and will serve as a world-class complex for digital media industries focusing on broadcasting, films/animation, computer gaming, music and e-learning. SMDC is expected to create some 270,000 jobs and W16 tri (~ S$ 12 bil) a year.
Europe	▪ An innovative action research project called "**Banking on Culture**" seeks to investigate and stimulate new sources of financial investment for the cultural cluster in Europe.

THE STATE OF THE CREATIVE CLUSTER

Several countries, including US, UK and Australia, have made significant progress in their attempts to quantify the economic contributions of the creative cluster. The results of their groundbreaking work are summarised in *Table 2*, alongside local statistics extracted by the Singapore Department of Statistics using the Australian framework (More details on Singapore's copyright industries are enclosed in *Box 1*). As economic research on the creative cluster is a very new field, an international standard for creative industries has yet to be established. However the current findings already provide a hint at the vast promise of the creative cluster. The size of Singapore's creative cluster has been estimated to be around 3% of Gross Domestic Product (GDP) and currently lags behind that of US (7.8%), UK (5.0%) and Australia (3.3%).

GDP Contribution of Singapore's Creative Cluster
Depending on the methodology used, the current value of the creative cluster in Singapore has been estimated to be between 2.8% (2000 figure based on the Australian copyright industries methodology) to 3.2% (1999 figure based on the UK creative industries methodology).

Source: Singapore Department of Statistics

Phenomenal Growth
Since 1996 to 2001, the core copyright industries in US have grown nearly five times as fast as the economy as a whole.

Source: *Copyright Industries in the U.S. Economy – the 2002 Report*

In all the surveyed countries, the creative cluster is growing at a faster pace than the overall economy, with growth rates accelerating to as much as 3 – 5 times that of the overall economy in recent years. Even in Singapore where the creative cluster is at a comparatively nascent stage, the average annual growth rate from 1986 – 2000 is estimated to be 13.4%, as compared to 10.6% for the overall economy. This is not surprising when one considers that the same factors of human imagination, knowledge, innovation and enterprise that now drive the global economy, are best manifested within the creative cluster.

Table 2: Cross-Country Comparison of the Economic Value of Total Copyright Industries*.

Country	Year	% GDP	Average Annual Growth Rate: %AAG Copyright Industries / %AAG Overall Economy (Period of Tracking)	Value Added	Export	% National Employment
US	2001	7.75	6.9 / 3.2 (1977 – 2001)	US$707.5 bil	US$88.97 bil (for core copyright industries only)	5.9
UK**	1997-1998	5.0	16 / < 6.0 (1997 – 1998)	£112.5 bil (Revenue)	£10.3 bil	4.6
Australia	1999 - 2000	3.3	5.7 / 4.85 (1995 – 2000)	AU$19.2 bil (Industry gross product)	AU$1.2 bil	3.8
Singapore	2000	2.8	13.4 / 10.6 (1986 – 2000)	S$4.8 bil	S$4.0 bil	3.4

* In US, the total copyright industries comprise core copyright, partial copyright industries, distribution copyright industries and copyright-related industries. The Australia definition is similar but does not include the copyright-related industries. The Singapore statistics were extracted by the Department of Statistics based on the Australian framework of copyright industries. The full listing of industries is provided at **Annex 1.2.**

Sources:
- Copyright Industries in the U.S. Economy – the 2002 Report, Stephen E. Siwek, Economists Incorporated
- Creative Industries Mapping Document 2001, UK Creative Industries Task force, London
- The Economic Contribution of Australia Copyright Industries, Prepared by The Allen Consulting Group for Australian Copyright Council and Centre for Copyright Studies
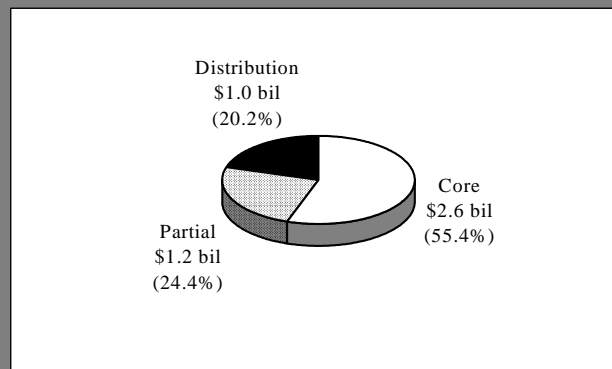- Singapore Department of Statistics

** The definition of UK creative industries is slightly different from the definition of total copyright industries adopted by US and Australia. The identified industries comprise advertising, architecture, the art and antiques market, crafts, design, designer fashion, film and video, interactive leisure software, music, the performing arts, publishing, software and computer services, television and radio.

Box 1: The Total Copyright Industries in Singapore Today

The Department of Statistics have conducted a study on the economic value of the total copyright industries in Singapore (based on the Australian methodology in *Annex 1.2*). The key findings are summarised below:

- In 2000, there were about 8,100 establishments in the copyright industries compared to 5,000 in 1990). This represented an average annual growth of 5.0 %;
- Total value-added generated by the copyright industries in Singapore amounted to $4.8 billion in 2000 (See *Chart 1*). Among the three groups, the core copyright industries (mainly data processing services, printing of newspapers and publishing of periodicals, books and magazines) accounted for the bulk (55%) of value added. The partial copyright industries (mainly advertising and architectural services) contributed another 24% while the remaining 20% accrued to the distribution copyright industries (mainly wholesale trade of photographic equipment, toys and sporting goods);

Chart 1: Composition of Singapore's Total Copyright Industries (2000)

Distribution
$1.0 bil
(20.2%)

Core
$2.6 bil
(55.4%)

Partial
$1.2 bil
(24.4%)

- The value-added of the total copyright industries expanded significantly from $0.8 billion in 1986 to $4.8 billion in 2000, representing an average annual growth of 13.4%. Their growth was faster than the economy's average annual increase of 10.6% over the same period. As a result, the economic importance of the copyright industries relative to the whole economy improved from 2.0% (as % share of GDP) in 1986 to 2.8% in 2000;
- Employment in the copyright industries grew at a faster rate than that of the overall economy. Total copyright employment rose from 30,700 in 1986 to 72,200 in 2000, an average annual increase of 6.3%. This exceeded the average annual growth of 3.8% in employment for the economy over the same period;

SWOT ANALYSIS

Strengths

- Cosmopolitan Population

Singapore's well-educated and cosmopolitan populace provides us with a sophisticated consumer base to serve as a test-bed for our creative products.

- Supporting Factors

Singapore's strong grounding in IT and telecommunications, our new focus on promoting innovation and entreprenuership, and our investment in the arts over the past decade make us well positioned to exploit new opportunities in the fusion of arts, business and technology

Weaknesses

- Limited Domestic Market Size

Singapore's limited market size requires our creative enterprises to adopt a global mindset.

- Financing Options for Creative Industries

Creative industries often have problems securing financing due to several reasons:
   - Financial companies and venture capitalists may lack industry-specific knowledge
   - Creative enterprises and individuals may lack business know-how
   - High percentage of self-employed and small businesses
   - Returns to Investment are sometimes intangible or long-term

- Creative Climate

Singapore needs to shake off its image of being an "over-regulated" city state, with a low tolerance for divergent views. Creative people and enterprises are attracted to, and flourish in places which are tolerant of creative discourse and provide space for experimentation.

- Software vs Hardware

The Singapore Government has pumped in more than $1 billion worth of investment over the past decade on arts infrastructure, including the $600 mil Esplanade, the new Asian Civilisation Museum II and other projects. To unleash the full potential of this infrastructure, there needs to be a parallel investment in software. We are currently lagging in this aspect vis-à-vis international creative hubs, even though the Renaissance City funding has alleviated the funding shortage slightly.

Opportunities

- Tapping on Asia's Huge Market

Singapore's multi-cultural heritage and multi-lingualism places us in a good position to tap into the growing markets in the region such as China, Malaysia and Indonesia. There is a potential audience of 2.8 billion people with a 7-hour flight radius.

- New Asia Cultural Exports

Building on STB's branding of Singapore as a 'New Asia' tourist destination where East meets West, there is an opportunity space for us to develop lifestyle or entertainment products that are uniquely Singaporean for the global market. We can draw inspiration from the J-pop and K-pop phenomena where cultural exports from Japan and Korea gained international popularity.

- Digital Media

Gartner, IDC and Forrester forecast that the digital media industry stands at more than US$100 billion last year and is likely to reach US$200 billion to US$350 billion in 3 years' time. This means that Singapore has the opportunity to capture US$5 billion to US$24 billion by being one of the top 3 to 5 digital media capitals for revenue flows.

Threats

- Intensifying International Competition

Global competition is intensifying, with many countries all over the world striving to harness the full economic value of their creative cluster.

- War for Creative Talent

Singapore has to compete vis-à-vis well-established creative hubs of the world, such as London, New York and San Francisco to attract and retain creative talent. Today, there are many anecdotal examples of "creative brain drain" where our local creative talent venture overseas to develop their careers.

VISION

Our vision is to develop a vibrant and sustainable creative cluster to propel the growth of Singapore's Creative Economy. This is in line with our new economic strategy to identify potential niches which are knowledge-based, innovation-focussed and has high growth potential.

Targets for 2012 include:
- **Double % GDP contribution** of the creative cluster from an estimated 3% in 2000 to 6% in 2012;
- Establish a reputation for Singapore as a **New Asia Creative Hub**:
  - Ranked among top 10 countries in Global Competitiveness Rankings for design-related categories
  - Recognised as a premier global media city
  - Seen as an innovative and multi-talented global city for arts and culture

Our success in developing a vibrant and self-sustaining creative cluster would depend on how well we develop and deploy our cultural assets. This would require a total value chain approach, beginning with the nurturing of a creative people who form the lifeblood of the creative cluster and also fuel the demand for creative products and services. This important issue will also be taken up by the ERC Subcommittee on Enhancing Human Capital, which will complement the work presented here.

This report is the culmination of 7 months' of intensive research and consultation with local and international practitioners, academics, industry and government agencies (*Annex 1.3 & 1.4*). Over the next few chapters, we will present specific strategies in the areas of (i) arts and culture, (ii) design and (iii) media, to exploit the new opportunities offered by the convergence of arts, business and technology.

INTRODUCTION

This chapter gives an overview of the economic performance of Singapore's arts and cultural sector, and the issues and challenges in developing this sector. It also discusses in broad strokes the future strategic direction to unleash the full potential of Singapore's arts and cultural assets. As defined in this report, the arts and cultural sector comprises performing arts, visual arts, literary arts, photography, crafts, libraries, museums, archives, galleries, auctions, impresarios, heritage sites, performing arts sites, festivals and arts supporting companies.

STATE OF THE ARTS

Economic Performance of the Arts and Cultural Industries

Singapore's arts and cultural scene has become more vibrant over the past decade. Some of the indicators are reflected below:

- The total number of performing arts activities and visual arts exhibitions increased by some 170% from about 1,700 in 1989 to about 4,600 in 2001.
- Ticketed attendance for performing arts increased by 67% from 562,000 in 1989 to 940,000 in 2001, translating to an average of 2,575 ticketed patrons a day.
- Visitorship to the National Museums increased 70% from 282,025 in FY 1989 to 480,000 in FY 2001.
- In 2001, two out of every three Singaporeans are library members, as compared to one out of every four Singaporeans in 1991.
- Visitorship to the libraries increased 5 times from 5.5 million in FY 1994 to 27.8 million in FY 2001.

The value-added of the arts and cultural activities in 2000 was estimated to be around $470 million in 2000 (or 0.29%

Historical Milestones

- The **1989 Report on Advisory Council on Culture and the Arts (ACCA)**, chaired by the late former President Mr Ong Teng Cheong then Deputy Prime Minister, is widely regarded as a watershed in the development of our arts and cultural scene. The Report paved the way for the formation of National Arts Council (NAC) and National Heritage Board (NHB). It also initiated the development of infrastructure such as the Singapore Arts Museum (SAM), the Asian Civilizations Museum (ACM) and The Esplanade – Theatres on the Bay.

- In December 1996 the **Committee on National Arts Education**, headed by Dr Soh Kay Cheng, proposed a coherent national arts education policy to develop the necessary creative competencies for Singapore in their report entitled "**The Next Wave of Creative Energy**".

- In April 1994, the Government endorsed the landmark **Library 2000 Report** that set the directions for transforming libraries into key pillars supporting learning. This led to the formation of the National Library Board to translate into reality the Library 2000 vision of expanding the learning capacity of the nation. This Report is now used as a reference guide by libraries worldwide.

- The report by the **Committee to Upgrade LASALLE-SIA and NAFA in July 1998** helped to legitimise arts manpower development at the tertiary level. Headed by Dr Tan Chin Nam, the Committee's report, "**Creative Singapore – A Renaissance Nation in the Knowledge Age**", recommended polytechnic level Government funding for LASALLE-SIA and Nanyang Academy of Fine Arts (NAFA). It also proposed the establishment of an Institute of the Arts (ITA) at the National University of Singapore (NUS), which will conduct degree courses in the performing arts. Singapore's first Conservatory of Music, offering degree programmes for music, will open in 2003.

- More recently, the Government endorsed the **Renaissance City Report in March 2000** by MITA. The Renaissance City Report had two main aims: to establish Singapore as a global arts city and to provide cultural ballast in our nation-building efforts. Six specific thrusts ranging from developing a strong arts and cultural base, recognising and grooming local talent to developing an arts and cultural "renaissance" economy were proposed. An additional $50 mil over 5 years in funding was allocated to MITA to implement the RCP blueprint.

of GDP), as compared to $43 million (or 0.11% of GDP) in 1986 [Source: Department of Statistics]. This figure is deceptively small and does not give full justice to the wide-ranging economic impact of arts and cultural industries. First of all, arts and cultural activities command a high multiplier effect. Estimations from an updated 1995 input-output table compiled by NUS Centre for Business Research & Development, imply that every $1 million of expenditures on arts & cultural activities would generate about:

- $660,000 of additional output indirectly;
- $270,000 of direct value added and $380,000 of indirect value added; and
- 5 jobs directly and an additional 13 jobs indirectly.

This **multiplier of 1.66** is substantially higher than the banking industry's 1.4 and the petrochemical industry's 1.35.

Furthermore, it is important to recognise that the arts and cultural sector is **the artistic core of the creative cluster**, and is therefore part of the creative value chain, and closely linked to the overall economic performance of the cluster. Interacting closely with the design and media sectors, the arts and cultural sector provide the learning tools and experimentation space for creative individuals to hone their arts. For example, visual arts is a fundamental skill for designers while the humanities gives inspiration to screenwrights. The dynamism of the creative ecosystem is such that creative individuals can move with ease between the various industries, bringing about cross-pollination of ideas.

Finally, a vibrant arts and culture scene is vital to enhance **the attractiveness of Singapore to global talent and businesses**. A 2001 survey commissioned by EDB to study the quality of life for foreign talent based abroad and in Singapore showed that the Singapore arts and culture scene needs to be more vibrant in order to attract more talent here. A separate multi-country market assessment by Watson Wyatt in 2002 validated this, with foreign talents ranking the adequacy of cultural activities in Singapore as being the least satisfactory among lifestyle-related factors.

The Developmental Approach Thus Far

The National Arts Council (NAC), National Heritage Board (NHB), National Library Board (NLB) and Singapore Tourism Board (STB) are the key players involved in the development of the arts and cultural sector. Traditionally, STB has approached arts development from a business (tourism) angle, while the MITA agencies - NAC, NHB and NLB – have looked at arts from a non-profit angle (*Table 1*). This dichotomy of roles is becoming increasingly obsolete and does not reflect well the complex interdependence of commercial and non-profit arts. While non-profit arts and cultural activities constitute a public good, there is no doubt that they interact very closely with their commercial counterparts. The interplay between non-profit and commercial arts is dramatically revealed in the relationship between non-profit theatres and Broadway's commercial theatre in the US[1]. Because the economics of Broadway work against the development of plays, the task of producing much new work falls to the nation's non-profit theatres. Over the past twenty years, 44% of the new Broadway plays originated in the non-profit sector**. Henceforth, MITA**

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[1] Creative America: A Report to the President by the President's Committee on the Arts and Humanities, 1997

agencies and STB will work together to unleash the economic potential of the arts and cultural sector.

Table 1: Traditional Roles of Key Agencies in Developing the Arts and Cultural Sector.

NAC, NHB, NLB *"Arts for Arts' Sake"*	STB *"Arts for Business' Sake"*
• Artistes and audience development • Outreach programmes • Art education • Financial assistance for non-profit arts • Arts infrastructure	• Investment promotion to attract top international arts investors • Industry development of local arts businesses • Tax & financial incentives for commercial as well as non-profit but viable arts groups • Arts tourism programme to cultivate travel trade & global media • International marketing of Singapore as an arts destination ("global arts city") and regional arts hub both for events ("eventful city") and for business

SWOT ANALYSIS

Strengths

▪ <u>Cosmopolitan and Relatively Sophisticated Local Market</u>

With younger Singaporeans becoming increasingly well-educated, they fuel the growing demand for a more vibrant and innovative arts, cultural and entertainment scene. Three quarters of the Singapore Arts Festival audience are less than 40 years old. Singapore now has a critical mass of some 250,000 theatregoers.

▪ <u>Investment in Arts Infrastructure</u>

From 1989 to present date, the Singapore Government has invested more than $ 1 billion in building arts and cultural infrastructure. New projects include the soon-to-be-opened $600 million Esplanade, the new Asian Civilisations Museum II at Empress Place, Singapore Tyler Print Institute, the redevelopment of Singapore History Museum, the Old Parliament House and Drama Centre, among others. In addition, sports infrastructure, such as the National Indoor Stadium, have also been used as integrated venues for arts, cultural and entertainment activities.

Singapore's Arts and Cultural Infrastructure
- What's New? What's Next?

▪ **Esplanade, Singapore's premier performing art centre, will open in Oct 2002**
▪ World War II Interpretative Centre, Reflections @ Bukit Chandu was officially launched on 15 Feb 2002
▪ Singapore Tyler Print Institute was launched on 10 Apr 2002.
▪ Asian Civilisation Museum @ Empress Place was officially opened in Feb 2003
▪ The Singapore History Museum will be re-developed (2003 – 2005)
▪ Niche libraries, library@esplanade and Sengkang Community Library are opening in 2002.
▪ **New National Library @ Singapore will open in 2004**
▪ The Jurong East Regional Library will be re-developed to adopt the fusion concept (art-business-technology)
▪ Arts belts @ Little India, Chinatown and Waterloo Street were created to provide arts housing space
▪ **Old Parliament House's conversion into a multi-disciplinary arts centre will make the Empress Place area Singapore's premier Arts and Cultural belt**
▪ Drama Centre will be redeveloped.

Weaknesses

▪ Lagging Investments in Software

To unleash the full potential of our arts infrastructure, there needs to be a parallel investment in software, such as in developing our creative talents and audiences. We are currently lagging in this aspect vis-à-vis international creative hubs (**Table 2**), even though the Renaissance City Project funding has alleviated the funding shortage to a certain extent. Software development should be continued, and further enhanced, to develop our cultural capital further before we can talk about any meaningful deployment to create new value for Singapore.

**Table 2: Comparison of Government Funding for the Arts (*Source: MITA)*

Item	Singapore 2001/2002* (1998/1999)	London 1997/1998 (1=S$2.43)	New York City 1998 (US$1=S$1.69)	Victoria, Australia 2001/2002 (A$1 = S$0.97)	Hong Kong (HK1 = S$ 0.2)
Per Capita funding Incl. Capital expenditure	S$34.53 (S$26.42)	S$143.04	S$44.38	S$41.60	n.a
Excl.Capital expenditure	S$14.75 (S$7.27)	S$108.72	S$32.85	S$19.91	S$49.67

* 2001/2002 figures include injection of funding from Renaissance City budget.

▪ Small Domestic Market

Local audience development is an essential market creator. However there is no strong culture of arts appreciation among the general population, especially among the heartlanders. There is a need to enhance our arts education and outreach programmes so as to strengthen our local market demand. At the same time, our local enterprises have to explore ways to deepen their local market reach and to internationalise their offerings.

▪ High Business Costs

While some arts companies are profitable, one key issue faced by potential investors is the high costs of operating an arts business in Singapore. In particular, the high commercial rental rates (both long term leasing of gallery/office space, and short term hire of arts facilities e.g. theatres, exhibition halls) is one major hurdle. To help companies defray these high costs, incentives need to be provided to make Singapore a more viable business location.

▪ Low Private Sector Partnership and Sponsorship

An important deciding factor for the staging of worldclass arts and cultural events in Singapore is the availability of private sector partners and sponsors. It is necessary to intensify efforts in our cultivation of the private sector as investor, patron and donor. In the US for example, direct federal funding of arts and entertainment is limited, but various tax breaks and incentives are offered to encourage contributions and sponsorships by corporations, private foundations and individuals.   This

leverages on a strong national tradition of corporate and individual philanthropy. While there are already existing NAC, NHB and NLB-administered tax exemption schemes, there is a need to further increase the range of tax incentives on offer to encourage greater participation by the private sector, and to develop a strong tradition of cultural philanthropy in Singapore.

Opportunities

- Cultural Tourism

According to the World Tourism Organisation, cultural tourism accounts for 37% of global tourism and is forecasted to grow at a rate of 15% per year[2]. In Singapore, the value-added of arts tourism increased from $2.19 million in 1986 to $38.4 million in 1999, registering an average annual growth rate of 24.6%.
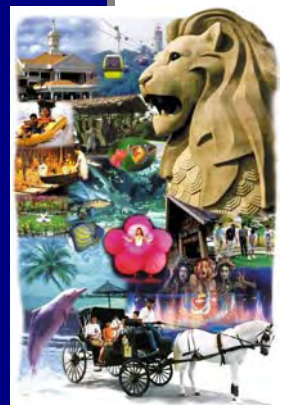
- Fusion Entertainment

The fusion of arts, business and technology can be applied to create unique experiences (events, parks, etc) for consumers (see box on "Remaking Sentosa").

- Singapore Content and Brand

The fusion of arts into business and technology can also be applied to create a more distinctive Singapore identity and branding for our products, content and services.

> **Remaking Sentosa**
> *- Developing An Experiential Fusion Park*
>
> The Sentosa Development Corporation (SDC) is in preliminary discussions with multi-agencies to develop a hi-tech, hi-touch experiential park as a key attraction on the remade Sentosa. Tearing away from the convention of developing theme parks with rollercoasters and theme rides, SDC will endeavour to fuse arts, business and technology into a potent brew of differentiated experiences for all visitors. Some of the ideas being considered for the park include a digital media urban entertainment centre and an integrated Science Centre and Children's Museum with an eco-forest. SDC envisages the most advanced technology and richest cultural content woven seamlessly into Sentosa's nature setting, without compromising the tranquillity and unique character of the island.

- Proximity to Huge Asian Market and Cultural Resources

There is a potential regional audience of 630 million within a 3-hour flight time, and 2.8 billion within a 7-hr flight time. This, coupled with our proximity to a vast wealth of arts and cultural resources in the region, means that we are well-placed to offer a total experience of Asian arts and culture to people from the region and beyond.

Threats

- Increasing Regional Competition

Many countries in Asia are seeking actively to develop their own arts and cultural industries through investments in infrastructure and lowering business costs for arts and cultural enterprises. Some of the more aggressive competitors are:
- Malaysia which offers attractive incentives, high level Cabinet support and good response from audiences;
- Hong Kong which is blessed with a huge hinterland, where it can tap on the mainland Chinese audience and talent base;

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[2] Source: Robert Palmer, President and CEO, Palmer-Rae Associates, International Cultural Consultants
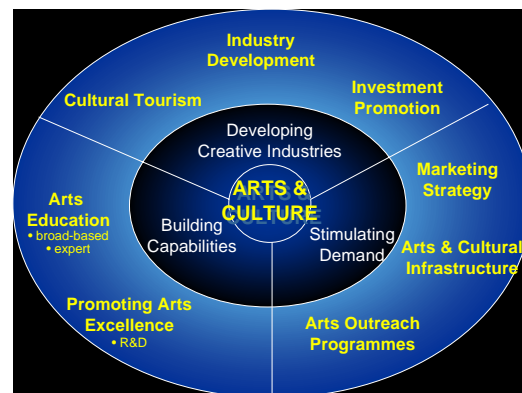
- Shanghai which has a large talent and audience base and has invested in artistic support and new venues such as the Shanghai Grand Theatre and Oriental Art Centre.

RENAISSANCE CITY 2.0

Singapore has indeed achieved a lot in the past decade of arts development. Looking forward, our new strategic direction is to develop and deploy our arts and cultural sector, with the objective of unlocking the full potential of our existing arts infrastructure and the overall Creative Cluster. We will seek to integrate arts and cultural development more deeply and pervasively into the economic landscape of Singapore, and to fully harness its multi-faceted influence on our national competitiveness. This will help us achieve **our vision of Singapore as a Renaissance City – a highly innovative and multi-talented global city for arts and culture.**

A fundamental focus in the coming years would be to ensure that we **maximise the potential of the existing and new arts infrastructure by developing our software and enhancing the level of integration with the business and people sectors**. At the same time, **MITA agencies must shift away from the "arts for arts' sake" mindset, to look at the development of arts from a holistic perspective, to contribute towards the development of the creative industries as well as our nation's social development.**

Building on the original Renaissance City Report, three strategies have been identified to propel the arts and cultural sector forward. The list of recommendations described below is by no means exhaustive, but highlights some of the key initiatives currently being explored.

Strategy 1: Build CREATIVE CAPABILITIES

Recommendation 1.1: Embed Arts, Design and Media within All Levels of Education

While it has often been argued that the arts must be considered an integral part of the school's core curriculum, it is often difficult to justify more curriculum time for arts vis-à-vis other core subjects such as Languages, Science and Maths. It is therefore recommended that the arts, design and media be embedded as learning tools for all levels of education. For example, drama and literature could be employed to help students enhance their language abilities while multi-media could be used as a means to demonstrate creativity in science and maths projects. Today, at least 40 MBA programmes throughout the US feature design within their curriculum and a whole generation of US students has come out of the system with a solid grounding in design. To this end, Singapore would also need passionate teachers who are skilful in weaving in arts, design and media into the education curriculum to help their students learn and think more broadly and creatively.

Recommendation 1.2: Establish a Flagship Art, Design and Media University Programme[3]

Currently, three of the Polytechnics (NP, NYP, TP) and Specialised Art Schools (LASALLE-SIA and NAFA) provide diploma level education in the various design disciplines, as well as degree programmes with foreign universities. However, the local universities (NUS, NTU and SMU) offer limited options in terms of degree courses in visual arts, design and media[4].

It is recommended that a flagship art, design and media university programme be developed at the proposed NUS-X campus, to complement the current design-related programmes at the NUS School of Environment and Design and the Design Technology Institute (School of Engineering). It is further proposed that the new School leverage on international expertise by collaborating with leading institutions such as Royal College of Art (London), University of Art and Design (Helsinki), and Pasedena Art Centre (Los Angeles). This new School of Art, Design and Media could differentiate itself by offering a broad-based, research-oriented curriculum, which straddles topics from visual arts, humanities, technology, communications to business. The school will produce multi-disciplinary creative experts who are well-equipped to propel the growth of the creative industries.

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[3] This proposal could complement the 1998 Report of the Committee to Upgrade LASALLE and NAFA, which recommended that the two schools be allowed to award NUS degrees in the visual arts at the end of 5 years if they meet the necessary standards as agreed by the Arts Education Council.

[4] Some design modules are present in the engineering courses offered at NTU and NUS, including the Design Technology Institute (with the Eindhoven Institute of Technology) in the NUS Faculty of Engineering. There is also the School of Design and Environment in NUS, which offers the only degrees in Architecture (BAArch hons and MArch), and Industrial Design (BAID hons) in Singapore. The first batch of students in Industrial Design will graduate in June 2003.

Strategy 2: Stimulate SOPHISTICATED DEMAND

<u>Recommendation 2.1</u>: Establish a "Percent-for-the-Arts" Scheme to Promote Public Art

Through the inclusion of artworks in public spaces and the incorporation of tasteful design and landscaping in the neighbourhood, we can widen people's exposure to, and appreciation of arts and its relevance in everyday life. It is recommended that Singapore establish a "Percent-for-the-Arts" scheme to promote the development of public art in Singapore. The Percent-for-the-Arts Scheme has been implemented, with much success, by many countries and cities.

Singapore's Percent-for-the-Arts Scheme can be as follows:

Funding Sector	Scheme	Proposed Percentage
Government	Mandatory	1% of Development Budget
Private	Voluntary (with tax exemption)	1% of Development Budget

The fund could be used to commission or procure artworks (sculptures, paintings, murals, art installations, etc.) in common areas accessible 24 hours a day to the public, to maintain public artworks[5] and for other public art projects. **One-North** will prototype this scheme, which should eventually be made mandatory for all public sector agencies. The 1% rule can be used as a guide for private sector expenditure on the art, rather than a hard-and-fast rule. Tax exemption or even double tax deduction could be offered to companies as an incentive to invest in public art.

<u>Recommendation 2.2</u>: Develop Fusion Space for the People

There is tremendous potential in creating fusion spaces that offer richer and more holistic experiences for users.   Fusion can take place across several dimensions. For example, we could fuse our memory institutions (libraries, museums and archives) into a blended learning experience. We could also look at the integration of arts, business and technology as a source of inspiration for our library design, collections and services. Some of the new initiatives could include:

- A Southeast Asian Arts, Heritage and Cultural Library
  - This library will serve as a resource centre for Southeast Asian arts, heritage and culture, and promote Singapore as a regional centre for the arts. Apart from hosting collections from around Singapore and around the region, the library can be used as a venue to exhibit and showcase arts collections.
- Satellite Arts Libraries
  - These will complement the Southeast Asian Arts, Heritage and Cultural Library in promoting greater awareness and interest in the arts. Their focus will be on "local" content and culture
- Ethnic Language Libraries
  - These libraries will provide resources and promote activities for the various ethnic communities to better understand their own communities and those of their ethnic

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[5] 30-40% of the Percent-for-the-Arts funding should be set aside for conservation. For instance, this is set at 40% in Los Angeles.

brothers. They have the potential to serve as centres of research and a visiting site for tourists.

▪ Jurong and Tampines Regional Libraries
- These libraries will be developed as fusion spaces adopting a cross-disciplinary approach. Jurong Regional Library will seamlessly integrate arts, business and technology into every aspect of the library's design, collection and services. It is envisaged that it will become a focal point for artists to mingle and interact with entrepreneurs and research scientists. It will also be a testbed for incubating creative ideas and innovations.
- Tampines Regional Library will promote social cohesion by infusing elements of culture and heritage into its library collections. Travelling thematic exhibitions from the Singapore History Museum, clans, associations and the archives can be brought into this fusion space, and visitors will be able to experience Singapore's rich cultural heritage and historical transformation through a myriad of activities woven tightly into both museum and library collections.

In addition to fusion libraries, niche libraries could also be established to provide in-depth information to help target economic sectors such as Life Sciences, Medicine, Law, Design and Media.

Recommendation 2.3: **Work with CDCs to Develop "Creative Towns" [6]**

It is recommended that a 'Creative Town' initiative be piloted with a selected township to serve as a developmental model for a vibrant, creative, culturally rich, entrepreneurial and technologically savvy community. This prototype can be fine-tuned and, eventually, adopted by the rest of the CDCs to evolve a Creative and Connected Singapore. The success of the Creative Town initiative would require the synergistic collaboration of the Public, Private and People Sectors.

The Creative Town concept should be aligned along the following objectives:
▪ Unleash the latent creativity and passion in each individual, and in doing so, enable our people to fulfil their diverse aspirations;
▪ Integrate arts, culture, design, business and technology into community planning and revitalisation efforts;
▪ Enhance the ideas-generating capacity and entrepreneurship qualities of the community through targeted training programmes, physical and virtual infrastructure, and mentoring schemes;
▪ Increase cultural awareness through programmes and infrastructure such as the "Percent-for-Art" Scheme, fusion spaces, satellite museums, niche libraries, research and documentation projects, etc; and
▪ Promote community bonding, local pride and participation through arts and cultural events and festivals, and the employment of the newest infocomm and media technologies.

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[6] Afternote: The Mayors' Committee Meeting endorsed the Creative Town proposal on 19 August 2002. A multi-agency taskforce involving private, public and people sectors is being set up to prototype the Creative Town concept at a selected township.

<u>Recommendation 2.4:</u> Develop a Virtual Cultural Resource Network

Facilitated by new infocomm media technologies, a new museum space has evolved – the virtual museum. Many overseas museums, including the Smithsonian Institute have ventured into this new area, offering visitors a virtual tour of museum exhibits. It is recommended that Singapore set up a Virtual Museum network that allows visitors to navigate through curated exhibitions. Scotland and Australia have also set up national databases on their cultural resources which can be easily accessed by users from home. It is recommended that Singapore set up a similar national cultural resources on-line network to capture all the cultural resources available in Singapore. A resource database on traditional Asian cultures can also be set up, since this is an area where Singapore has built up sufficient knowledge and expertise. Besides capturing physical collections in digital form, the digital media has also created a new form of art – cyberart. While it can be hosted in physical museums, putting it on the web ensures that interactions with the cyberart are more true to its form. Cyber interactions with visitors can also be tracked and researched, adding a new dimension to the development of virtual museums in Singapore.

<u>Recommendation 2.5:</u> Transform Singapore Art Series into Singapore Biennale to Enhance Singapore's International Profile

The Singapore Art series, the latest installment being the Nokia Singapore Art 2001, has its roots in the National Day Art Exhibition in 1968. Since 1999, NAC has been working closely with SAM to introduce newer and innovative ways of presenting Singapore art both locally and abroad. These changes are necessary to facilitate the showcasing of our artists abroad and Singapore's eventual entry into the international circle of renowned art events.

It is recommended that the Singapore Art Series be transformed into Singapore Biennale to become the most important national visual arts event showcasing top local and international artists. It should aim to be on par with other Biennales such as Shanghai Biennale and Kwangju Biennale, within the larger network of international biennales and triennales. Aside from emphasising excellence, innovation and originality, this proposed biennale should be an international event framed in an Asian and Southeast Asian context. To increase awareness and capture audience interest, this biennale should be audience-oriented and delivered to the public via additional creative modes such as the broadcast, print media and the Internet. To nurture the development and encourage creative experimentation among our young and promising artists, keeping in mind their long-term artistic development, a modest yet significant U19 (under-19) section can be created as a fringe event.

<u>Recommendation 2.6:</u> Develop a New Museum of Modern and Contemporary Art

In the longer term, it is recommended that Singapore develop a Museum of Modern and Contemporary Art (MoMCA). This would complement the existing Singapore Arts Museum (SAM) and the proposed SAM Annex (or Queen Street Gallery[QSG])

to strengthen Singapore's standing as a global city for arts and culture. MoMCA has the potential to replicate the phenomenal successes of Tate Modern and Guggenheim Bilbao in generating economic spinoffs and tourism dollars. While SAM and QSG specialise in national and Southeast Asian art, MoMCA will focus on showcasing international contemporary and modern artworks and design. MoMCA is also envisaged to become a new architectural icon that all Singaporeans identify with and be proud of. An international architectural concept competition could be held to select the best design. A site at the Marine Promontory has already been reserved for MoCMA. It is proposed that an international committee of museum advisers be appointed to guide the development and operation of this new museum.

Strategy 3: Develop CREATIVE INDUSTRIES

<u>**Recommendation 3.1**</u>: **Arts and Cultural Entrepreneurship**

Adopting a 'creative industries' perspective would entail fundamental changes in the way NAC, NHB and NLB operate, requiring them to adopt a holistic approach to develop the arts and cultural sector. Apart from developing the non-profit arts and cultural scene, these agencies can also help to promote arts and cultural entrepreneurship and identify new opportunities to enhance the arts and cultural industries' value-added to the economy.

Some of the new areas of focus for MITA agencies could be as follows:

- **Cultural Tourism**
  - It is recommended that MITA agencies collaborate with STB and travel agencies to develop cultural tours for Singaporeans and international audiences, both within Singapore and in the Southeast Asian region. This will be a win-win approach for STB and MITA agencies to grow the tourism industry and attract more cultural visitors.

<u>**NAC**</u>
- **Arts and Design Industries**
  - It is recommended that NAC facilitate the growth and internationalisation of arts and cultural industries such as recording music, publishing, and arts supporting industries etc. It could also encourage and facilitate business volunteerism through matchmaking the business expertise of individuals and corporations with arts groups. This will help to raise the professionalism of arts companies by upgrading their business administrative and marketing skills.
  - Given the close link between visual arts (currently under NAC's purview) and design, it is also proposed that NAC take on a key role to boost the design industry in Singapore by helping to raise design standards and public awareness.

NHB

- **Merchandising**
  - Another proposal is for NLB to tap on Singapore's wealth of heritage resources and to grant access and rights for commercial firms to use them for merchandising purposes. These merchandise could be developed as unique brands for Singapore, becoming another means of expressing the Singapore identity. The resources in NHB could also be packaged into useful reference materials for designers looking for inspiration and past trends.

- **Arts and Heritage Consultancy Services**
  - It is also recommended that NHB tap on its expertise to offer art and heritage consultancy services to businesses and organisations in Singapore and the region. The services offered could range from building up a corporate art collection, conservation, providing loans of art works, research services, archival services, advice on exhibition design and layout, etc.

NLB

- **Global Knowledge Concierge Service**
  - The recommendation is to develop Singapore into a first stop Asian Information Service, with NLB playing a key role in facilitating knowledge creation and arbitraging. It is proposed that **a Global Asian Business Research and Information Centre** be established to serve as a regional gateway to the world with a strong research team providing information analysis, syntheses and packaging service to ensure contextual relevance. It will also support the needs of Singapore's research, business and government communities. To facilitate tapping regional resources and translating that to national assets with marketable value, an **Asian e-Reference and Information Service** could be set in place to connect NLB with partner libraries.

- **Information as Business**
  - Studies have shown a growth in online information services worldwide, with governments and industry investing in digital content creation especially in US, UK, Europe and Australia. It is therefore recommended that NLB look into how to **grow the Information Business** into a sizeable source of revenue. An **Information Ecosystem** must first be developed, so that a Cluster Framework can be defined to groom and develop local companies through partnership programmes and attract leaders to hub out of Singapore to conduct research and publishing in the region. It is also proposed that an **Asian Information Marketplace** be developed to showcase NLB's capabilities and priced products and Services.

- **Library Consultancy Services**
  - A new opportunity also lies in Library Consultancy Services as Singapore is now seen as a leader in public library services. To attract new business, it is recommended that NLB set up a **Libraries @ SINGAPORE Showcase** and play an active role in library development elsewhere.

CHAPTER THREE:
THE "DESIGN SINGAPORE" INITIATIVE

INTRODUCTION

This chapter explains the role and importance of design as part of the Creative Economy to enhance Singapore's continued competitiveness. It sets out the vision and desired outcomes of the "Design Singapore" Initiative, as well as the strategic thrusts and draft recommendations of the taskforce.

DESIGN – THE NEW COMPETITIVE EDGE

Why Design Today?

With growing access to better technology, industries are increasingly competing at equal price and functionality. The new competitive advantage lies in the ability to carve out new markets and create new markets through the fusion of business, technology and arts. Design, which functions to bring about such convergence, has emerged as the key differentiation strategy for businesses[1].

> "At Sony, we assume all products of our competitors will have basically the same technology, price, performance, and features. Design is the only thing that differentiates one product from another in the marketplace."
>
> *Norio Ohga, Chairman and CEO, Sony*

> Design is the creative harmonic between culture and industry, technology and consumers, and engineering and art.
>
> *Dick Powell, Director, Seymour Powell*

The change in world demographics, such as greying populations, and trends brought about by new convergent technologies and the needs for sustainable development have also issued new challenges. These demand greater design sensitivities and solutions, from the tools and appliances we use to the spaces we live in.

What is Design?

Design can be understood as material and conceptual innovation, realised through the integration of arts, culture, business and technology, and experienced as beauty, value and meaning. It is therefore a misconception that design is just about look and feel and image makeover. Design embraces not only aesthetics but also market research, usability, safety,

> **Design Forms & Industries**
>
> **2D Planes:** Graphics, Illustration, Advertising, Signage, Multimedia, Communications
> **3D Objects:** Fashion, Crafts, Jewelry, Ceramics, Equipment, Devices, Appliances, Machinery
> **3D Space:** Architecture, Interiors, Lighting, Landscape
> **4D Movement:** Transport & mobility, Distribution Systems, people movers, virtual simulations
> **xD Futures:** Convergent Technologies, New Paradigms, New Media

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[1] Samsung's use of bold designs to transform itself has resulted in its world market capitalisation of US$48 billion in 2001. It was also singled out as the fastest growing brand in *BusinessWeek*'s latest survey with *Interbrand.* Samsung is ranked 34th in brand value globally in the survey on the world's most valuable brands, having gained as much as 30% increase in its brand value over the past year. (*Business Week,* August 5 2002) Research on UK companies has revealed that for every extra 1% turnover spent on design and product development, a company's profit and turnover will be increased by 3-4% over five years ("Contribution of Design to the UK Economy", Andrew Summers: London Business School, June 1997). When Fitch, an international design consultancy, tracked the share prices of its publicly-listed and quoted clients over a five year period, it found that the funds grew by 350% as compared to the market average of 90%. ("Competitive Advantage Through Design", Design Council UK 2001)

ergonomics, environmental sustainability, new technologies, logistics and consumer experience. In today's "weightless economy", design as manufactured product has evolved into design as intellectual property and cultural capital, embedded along the entire economic value chain.

What is the National Significance of Design?

For these reasons, design is critical not only to businesses, but is also high on the national agenda for many countries. Governments around the world have recognised the importance of design to national competitiveness in the following ways:

(a) Driving the innovation process and hence industry competitiveness;
(b) Contributing to the level of creativity, cultural buzz and attractiveness of a place for global talent; and
(c) Strengthening the marketing and unique "branding" of a country, including its products and services, to the world.

Countries such as Finland, Ireland, Spain, Denmark, UK and South Korea have therefore developed national design policies and championed design excellence as a key driver of national competitiveness. The accordance of such national significance to design is also because the promotion of design, as a result of design's multi-disciplinary and integrative function, cuts across many areas of national concern and planning, such as urban development, enterprise and trade development, education and capability development, culture, heritage and tourism.

DESIGN 2005! (FINLAND)

The Design 2005! programme sets the objectives for the public sector in the development of Finland's "design system", which is to enhance competitiveness through the development of education, training and research in the design field and the integration of design into the development of the national innovation system. It also seeks to develop a national design culture of international renown to strengthen the national identity and cultural image of Finland. Design policies are jointly crafted by the Finnish Ministry for Trade & Industry, the National Fund for Research & Development, the Ministry of Education, the Ministry of Foreign Affairs and the Ministry of Culture.

DESIGN IRELAND

Enterprise Ireland, a national economic development organisation, launched Design Ireland to "brand" Irish design and promote the value of design in all aspects of the Irish economy. It has embarked on trade missions to pursue new international partnerships in design.

THE GLASGOW COLLECTION (SCOTLAND)

The Glasgow Collection was created as part of the city's efforts to promote Glasgow as a centre of design. Each year, the Glasgow Collection will fund the design of at least 15 exciting and innovative new products, with the aim of taking a number of prototypes to production and working with local manufacturers to create products that help local businesses become more competitive.

HONG KONG DESIGN CENTRE

To further promote and galvanise the design industry in Hong Kong, the Hong Kong Government, in particular the Technology and Innovation Commission, supported the setting up of the Hong Kong Design Centre in the Heritage Building as the home to the new Hong Kong Federation of Designers.

SOUTH KOREA'S DESIGN POLICY

The First Five-Year-Plan for Industrial Design promotion (1993-1997) resulted in a rapid expansion in the number of design firms in Korea.

However, the challenge arising from the Financial Crisis was for fundamental innovation in Korea's design strategy, to promote design quality and not quantity.

The Second Five-Year-Plan was therefore launched to inspire design creativity and improve the quality of Korean design, including efforts to
- Raise public awareness
- Establish infrastructure such as the Korean Design Centre
- Enhance Design Education, including professional training
- Encourage industries to employ innovative designs, esp. SMEs
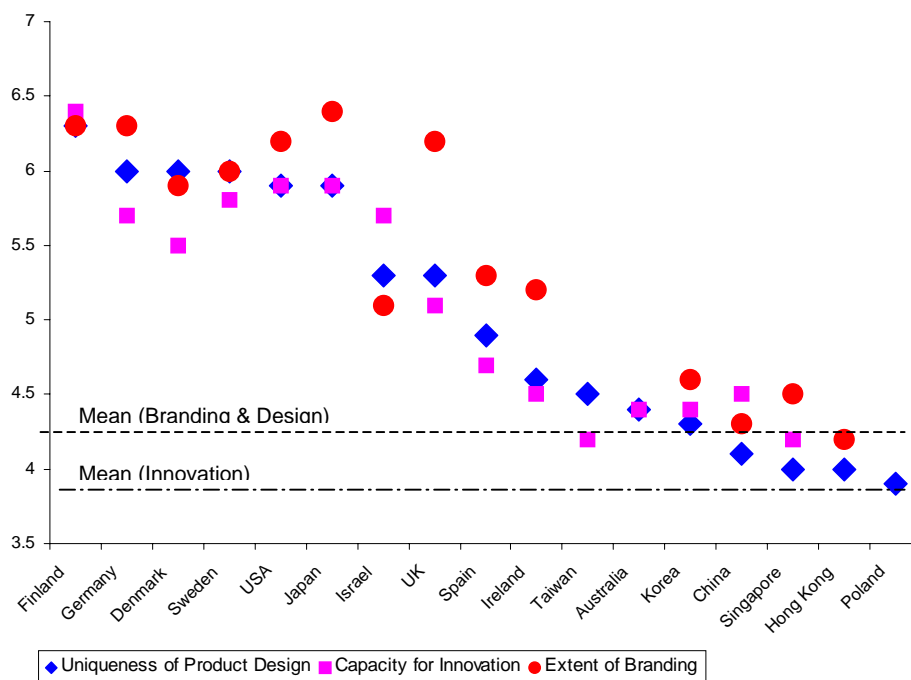- Host international events and promote the Korean brand

By elevating design to the top of its national agenda, South Korea has experienced an economic and cultural revival in recent years. Korea's design initiative is a deeply integrated one – it is fused with Korea's hosting of the 2002 World Cup, the transformation of brands such as Samsung and the phenomenal growth of Korea's cultural industries.

Design & Singapore's Competitiveness

According to the Global Competitiveness Report 2001-02, Singapore is only slightly above the mean for "Extent of Branding" and "Capacity for Innovation", and below the mean for "Uniqueness of Product Design." We are ranked 23rd, 26th and 34th respectively. As compared to other categories in the Report, these design-related categories indicate an area of our competitive disadvantage and weakness. Our closest competitors are the economies of Korea, Hong Kong, Taiwan, China and Ireland. The chart below provides the ranking and scores of selected countries (details are at **Annex 3.2**).

Chart 1: WEF Competitiveness Report 2001-02

Design Industry

In a 2001 study on the economic impact of product and visual communication design activities in Singapore (1999-2000)[2], the output of the design cluster in Singapore amounted to $3.9 billion in direct contribution to GDP, an additional $3 billion in indirect contribution, and $2.7 billion in value added which is a total 1.9% of GDP. The cluster, comprising more than 3500 establishments (see **Table 1a**), directly employed some 25,000 individuals. Significantly, the economic spin-offs from design were much higher than that for other industries (see **Table 1b**). Design is therefore one of the best ways to enhance and create new value in any industry.

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[2] The Study was commissioned by IE Singapore and conducted by the NUS CBRD (Centre for Business Research and Development). The Design cluster surveyed included software and multi-media, advertising, art and graphic design services, and industrial design activities.

Table 1a[3]

Design Industry	Establishments
Architectural Services	382
Advertising Services	686
Industrial Design Services	83
Interior Design Activities	1665
Art & Graphic Design Services	1089
Fashion Designing Services	53
IT & Web Design & Consultancy Services	699
Total	**3657**

Table 1b

Industry	Output Multiplier
Product & Visual Design	**1.76**
Arts & Culture	1.66
Computers	1.47
Exhibition	1.44
Banking Services	1.4
Petrochemical Refining	1.35

Government's Role in Developing Design

The Economic Development Board (EDB) and International Enterprise Singapore (IE Singapore) have been the government agencies looking after the design industry and the design capabilities of companies in Singapore. EDB oversees the development of industrial design companies in Singapore, including the attraction of international design companies to locate in Singapore, while IE Singapore is currently promoting and developing design as a strategic business capability for Singapore-based companies for internationalisation. IE Singapore's efforts encompass the development of new products and product adaptation capabilities for international markets as well as branding[4]. Together with its strategic partners, IE Singapore also organises the Singapore Design Awards, the Young Designers Award, and the International Design Forum.

Design Education

Design is taught as part of the "Design & Technology" course — a compulsory subject at lower Secondary and optional at upper Secondary levels. The 4 Polytechnics and Specialised Art Schools (LASALLE-SIA College of the Arts and Nanyang Academy of Fine Arts [NAFA]) provide diploma level education in the various design disciplines. Some 1500 and 800 students are registered for design-related diploma courses at the Polytechnics and Art Schools in 2001 respectively[5].

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[3] Source: Registry of Companies; and Department of Statistics 2001

[4] Between 1991 and 1995, the Design Centre was managed by the then TDB. Besides organising trade missions to promote Singapore design and organising the International Design Forum, the Centre also served as an exhibition space for international and local designs. IE Singapore's current design and brand capability developmental thrusts include the following:

(a) Cultivation of design and brand talents and related institutions

(b) Enhance companies design and brand capabilities via strategic consultancy, benchmarking and research initiatives

(c) Develop awareness through forums and customised programmes

(d) Create international networking and profiling opportunities

(e) Identify, profile and assist good Singapore designs and brands willing and able to go global

[5] Besides courses in product, fashion, environment and graphic design, other design-related courses include film and media studies in the Polytechnics, and visual arts at the Art Schools.

LASALLE-SIA and NAFA also collaborate with foreign universities to offer design-related degree courses.

Design modules are offered in the engineering courses offered at Nanyang Technological University (NTU) and National University of Singapore (NUS), including a Masters in Design Technology at the Design Technology Institute (with the Eindhoven Institute of Technology) in the NUS Faculty of Engineering. There is also the School of Design and Environment in NUS, which offers the only degrees in Architecture (BAArch hons and MArch) and Industrial Design (BAID hons) in Singapore. The first batch of 24 graduates in Industrial Design will graduate in June 2003.

STRENGTHS AND OPPORTUNITIES

Singapore's relatively small but sophisticated market and consumer base, our existing strengths in infocomm integration and other technology-intensive industries, as well as our unique position as a English-speaking gateway to Asia underlie the opportunities for design in Singapore.

- **A Leading Design and Experience Island:**
From urban planning to the design of public services such as our libraries and hospitals, and attractions such as the Night Safari, successful design marrying efficiency with beauty, technology with consumer sensitivity, has been employed to enhance total user experience and human potential.

- **A Global Design & Innovation Testbed for Pilots and Trials:**
This would include market research and the re-design of global products and services, leveraging on our multicultural population, and access to the Asian market; and the 'hothousing' of new design ideas, leveraging on our technological expertise and industrial and research infrastructure. Such a positioning would, in the long term, contribute to building our design expertise and reputation as a design hub in Asia

- **"New Asia" branding as a Unique and Exportable Style:**
The New Asia branding would leverage on Singapore's unique position as both a gateway to the various cultures of Asia and a contemporary cosmopolitan city, as the basis for design identity and values. This is particularly in the areas of lifestyle products and services, such as food and beverage, hospitality, entertainment and retail services sectors.

"The Philips Innovation Campus (in Singapore) will serve as a hotbed for creativity and technological progress ..... Philips and Singapore are in perfect innovation tandem and the campus will ultimately provide a platform for innovative minds to meet, against an intelligent ambience."

Cor Boonstra, former President and CEO, Royal Philips Electronics

PHILIPS

"In Banyan Tree in particular, we consider design — not only architectural but in every aspect of the guest experience — to be a very important factor in our competitive edge and it provides much of the value added in the business proposition."

Ho Kwon Ping, Chairman & CEO, Wah Chang Group

NLB National Library Board Singapore   **banyantree.com**

"NLB did put a lot of effort into design of our physical libraries...when we first renovated the National Library at Stamford Road. From its beginnings there and for every library thereafter, we prototyped and experimented with lifestyle concepts and ensured that we tried our best to optimise convenience, accessibility, affordability and usefulness. The designs of each library tried to reflect these concepts as much as possible."

Christopher Chia, CEO, National Library Board

GAPS & CHALLENGES

Challenge 1: From Basic Bottomline to *Design Excellence & Innovation*

In focusing on short-term bottomline gains, companies often fail to consider design strategies and to leverage design excellence as a means of producing unique and globally competitive products and services. There is also the misconception that design is only about aesthetics or packaging. The challenge is therefore to bring about a fundamental change towards valuing design excellence as a sustainable and strategic advantage for organisations.

Challenge 2: From Importing Design to *Nurturing Local Design Capabilities*

In the last 30 years of our economic and urban development, design consumption and import have outstripped the supply and export of the local design cluster. Although the design industry cut across a spectrum of activities from industrial, environment and multimedia design to visual communications, there has been no concerted effort to measure, study and coordinate the development of this cluster in a more holistic fashion. And while the components of a design system (such as design education, design companies, designers, innovation centres, design awards and conferences, and various grants and assistance schemes) are in place, efforts to develop resources for this sector are fragmented. The challenge is to synergise and build up local resources and capabilities, to nurture and raise the standards of the design cluster to be able to meet the competitive needs in Singapore and globally.

Challenge 3: From Manufactured to *Designed in Singapore*

While design activities are estimated to contribute a total of 1.9% of GDP in 2000, the true value of design in Singapore is still not fully realised and captured. This is especially as parts or final finished products are often not Singapore products or marketed and branded as designed in Singapore. The challenge is not only to anchor more design activities (design projects, enterprises and expertise) in Singapore, but more importantly, to capture the full value of products and services designed in Singapore.

Challenge 4: From Technical to *Multidisciplinary Design Education*

The potential of design education and its significance as a creative thinking and innovation tool is not fully tapped in Singapore. Design has been mainly approached as part of a technical education. Current gaps in a professional art and design education at university level would also need to be addressed. The challenge is to move towards a more holistic multidisciplinary design education to develop design professionals who can position design more strategically as an integration of the aesthetic, business, technological and sociological concerns. At the same time, to embed design in the teaching and learning of other disciplines and capabilities, such as in business and engineering schools.

Challenge 5: From Low to *High Design Awareness*

There is currently a low awareness of good design – its role, significance and qualities – or of the design industry and profession. The challenge is to raise the current level of public awareness on the use and impact of effective design in all aspects of life, through the fostering of a more pervasive design culture.
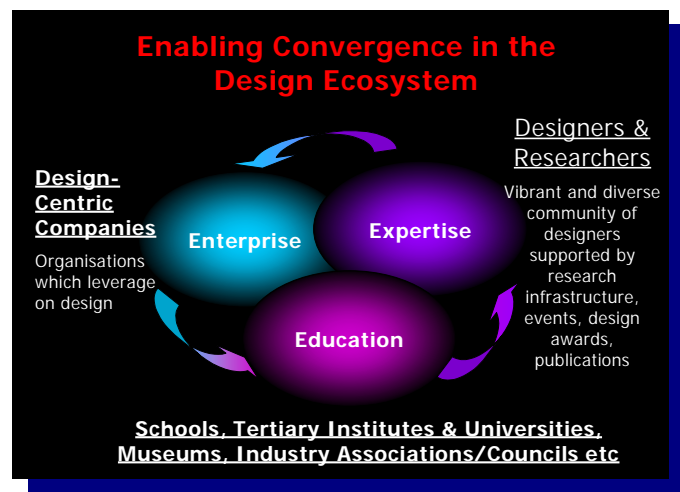
THE "DESIGN SINGAPORE" INITIATIVE

While design has been promoted as part of Singapore's industrial and trade landscape, predominantly as a business capability and tool, the need is to inspire a more fundamental change in the promotion and development of a pervasive design culture in Singapore. This change is premised on the new positioning of design as the creative integration of art, culture, business and technology, able to drive innovation and national competitiveness.

Our vision is therefore for Singapore to be *"A global cultural and business hub for the design of products, content and services, where design consciousness and creativity permeates all aspects of work, home and recreation".*

This vision is encapsulated in four outcomes. One is for Singapore to be **a leading centre for contemporary design in Asia.** We aim to attract regional and international design talents to work from Singapore, nurture innovative design firms, as well as to be both a leading provider of design education and the launchpad for creative and innovative designs into Asia. The second is to evolve **a distinctive Singapore design and brand identity.** We aim for Singapore products and services to be embued with a unique design identity in the global market, and for the "designed-in-Singapore" reputation to be a valuable branding, synonymous with high quality, integrity, creativity and excellence. The third outcome is for design excellence to be **a competitive advantage for local enterprises**. The fourth outcome is **a pervasive design culture**: We aim to raise the general level of design awareness and discourse, where effective design is understood and integrated into in all aspects of business, leisure and recreation, public service and education in Singapore.

A National Collaborative Strategy

The "Design Singapore" Initiative is the first national collaborative strategy to spearhead the promotion of design and tap on our business, artistic, cultural and technological resources and capabilities. It will seek to bring about convergence amongst the different players in the design ecosystem: enterprise (industry users and designers), expertise and education
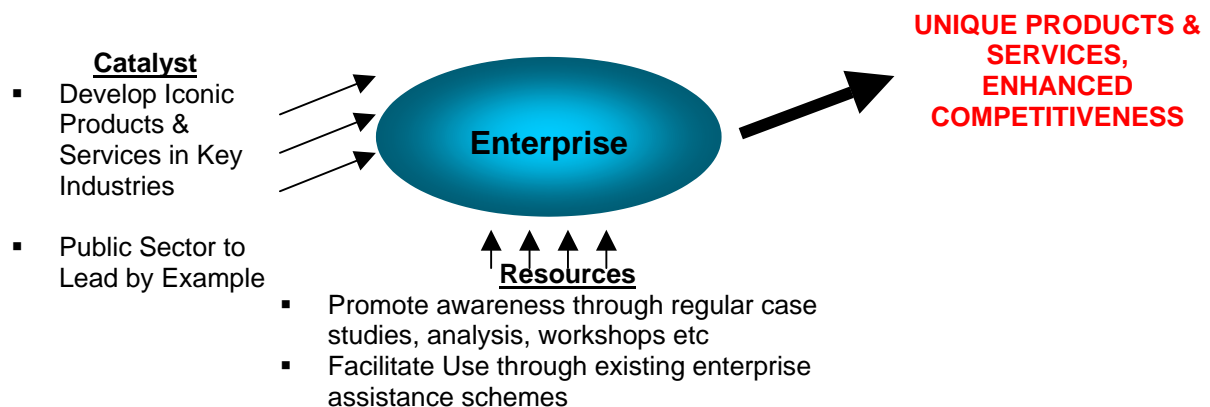

A multi-agency taskforce was set up to put in place a collaborative framework to promote and develop design excellence in Singapore. It will complete its study in **October 2002** in close consultation with international experts and industry players[6]. A summary of its preliminary strategies is tabulated in ***Annex 3.2***.

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[6] In its deliberations the taskforce has since embarked on a Study Mission to Europe and Hong Kong. The countries visited include Hong Kong, Spain (Barcelona), Italy (Milan), Germany (Stuttgart, Essen, Frankfurt), Denmark (Copenhagen), Finland (Helsinki) and the UK (London). It has received inputs from an International Advisory Panel and has also consulted local industry players, educational institutions as well as international experts. (***Annex 1.4)***

Strategy 1: Integrate DESIGN IN ENTERPRISE

This first strategy recognises industry as a key driver of design, hence the need for industry to be equipped to leverage on design excellence, to embed design in their businesses and to get design into boardroom agendas.

Catalyst
- Develop Iconic Products & Services in Key Industries

- Public Sector to Lead by Example

Enterprise

UNIQUE PRODUCTS & SERVICES, ENHANCED COMPETITIVENESS

Resources
- Promote awareness through regular case studies, analysis, workshops etc
- Facilitate Use through existing enterprise assistance schemes

Recommendation 1.1: Identify and Develop Iconic Singapore Products and Services

As evidenced by the products and services of countries such as Germany (e.g. Braun, BMW) and Japan (e.g. SONY), and also smaller industrial nations like Sweden (e.g. IKEA) and Finland (e.g. Nokia), a distinctive design identity and its qualities are often synonymous with the branding of a country, and vice versa[7]. It is a mutually reinforcing process. It is proposed that we identify and develop potential iconic "killer applications" that would help establish the standard for design excellence in Singapore, and to jumpstart the design initiative in industries. This could begin with industries where Singapore already has existing strengths and a unique proposition. Examples of potential industries include the hospitality and entertainment industry, where the design of consumer experience is critical, or infocomms, healthcare and medical products, where design would be sensitive to ergonomics, lifestyle, styling and new technologies (see *Annex 3.3*).

Recommendation 1.2: Promote Design in the Public Sector

To catalyse the development of effective design in Singapore and to nurture local design expertise, it is proposed that public sector agencies lead by example in supporting the use of effective design in its public buildings, amenities, services and spaces. This is the case in many countries, where the design of train/subway stations, bus stops, street furniture, parks and public buildings provide important

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[7] In the case of UK, the UK Design Council has set out to identify and promote innovative products and services created in Britain for the new Millennium, to showcase the competitiveness of British industry. The case studies and exhibition on these UK Millennium products have since travelled worldwide. Such initiatives are also common to other countries, such as Finland and Denmark.

opportunities to raise the standard of public service, develop both local design expertise and demand, and help profile a local design identity.

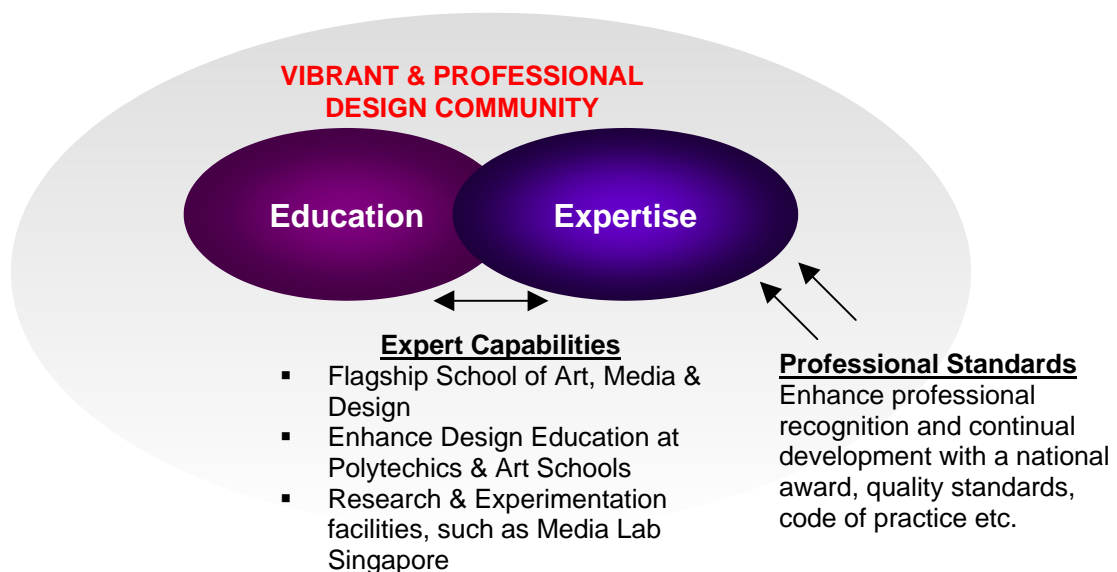### Recommendation 1.3: Raise Business Awareness of Design Excellence

Many companies, particularly SMEs, are not aware of the use and advantages of effective design. There is currently also no concerted effort to promote design to enterprises. It is proposed that there be a dedicated programme to develop regular case studies, surveys, global benchmarking, and other statistical analysis or tools as resources to promote design to companies.

Recommendation 1.4: Facilitate Use of Design by Businesses

There are currently many incentive and assistance schemes targeted at helping companies to redevelop their business processes, engage in R&D, internationalise, develop their manpower capabilities and so on. These include EDB's Start-up Enterprise Development Scheme (SEEDS), Research Incentive Scheme, and the Talent & Attachment Programme (TAP). IE Singapore also currently offers a grant of up to 50% of the company's cost in engaging a design consultant. Instead of proliferating the number of assistance schemes for businesses, it is recommended that we review the existing schemes with a view to encouraging the use of design.

Strategy 2: Develop a Vibrant & Professional DESIGN COMMUNITY

It is critical to nurture a vibrant design community in Singapore as the backbone of Singapore's design ecosystem, to raise the standard of design and provide the necessary expertise for both a sustainable growth of the design industry and a reputation for design excellence.

VIBRANT & PROFESSIONAL DESIGN COMMUNITY

Education Expertise

Expert Capabilities
- Flagship School of Art, Media & Design
- Enhance Design Education at Polytechics & Art Schools
- Research & Experimentation facilities, such as Media Lab Singapore

Professional Standards
Enhance professional recognition and continual development with a national award, quality standards, code of practice etc.

<u>Recommendation 2.1</u>: Establish a Flagship University Programme in Art, Design and Media

A flagship art, design and media programme at university level would help raise a new generation of creative designers with a strong intellectual foundation in the arts and humanities, and skills to integrate technology and business in design. The programme would offer degree courses in fine arts, design and multimedia, and work synergistically with the industry in research projects. In addition, the new School of Art, Design and Media should target a diverse and global intake, to create both a vibrant environment as well as anchor young regional and international talents to Singapore. The School would also contribute to design education in schools as well as to continuing professional development (CPD) for designers.

<u>Recommendation 2.2</u>: Enhance Design Education in Secondary Schools, Polytechnics & Arts Schools

Our polytechnics have been offering diploma programmes in design for the industry in the areas of fashion, media, product, graphic and interior design. It is critical that they continue to develop their teaching programme. It is recommended that a more detailed review of the existing design programme be made to enhance the diversity of options for students while enabling polytechnics to excel in specific areas. This would be with a view to deepen the level of industry collaboration, raise the standard of the design programme, and allow a more efficient distribution of resources, including professional talents. At the schools level, resources need to be better directed to strengthen the Design and Technology programme in selected schools to raise the profile of design earlier in the education process.

<u>Recommendation 2.3</u>: Establish Design Testbeds

To build up Singapore's capabilities in the area of research and hothousing of design concepts, it is recommended that a network of leading design entities be established to create design incubation centres and testbeds. For this purpose, we recommend the establishment of a Media Lab in Singapore to engage in multi-disciplinary media research and development sponsored by the industry. This could be integrated into the School of Art, Media and Design at the university.

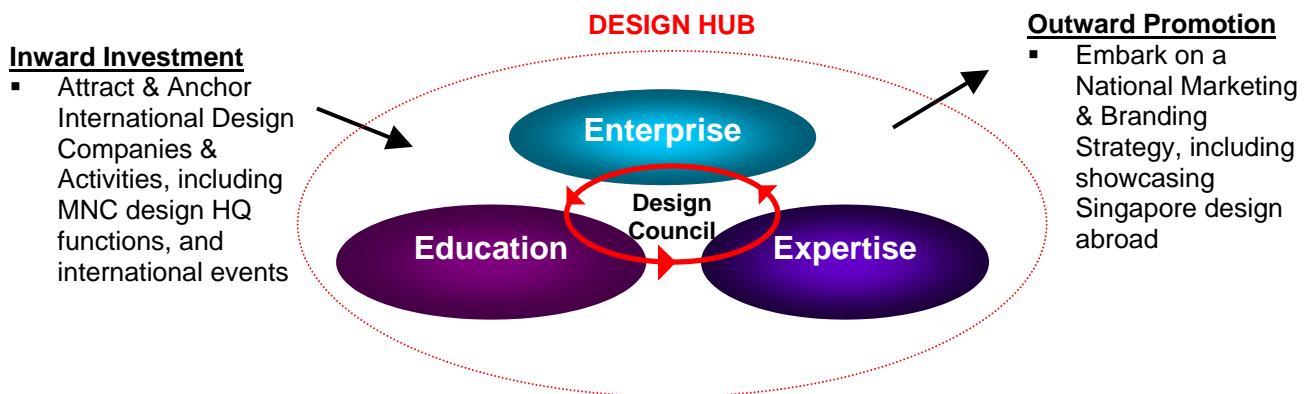**<u>Recommendation 2.4</u>: Enhance Professional Standing of Designers**

To raise the profile of the design profession, attract young talents to the industry and build up Singapore's design capabilities and standards, it would be critical to raise the professional standing of designers in Singapore. This would include enhancing the professional recognition by developing and implementing quality and performance standards for the industry, as well as professional codes of practice and conduct, in collaboration with industry and professional associations[8]. This would also include developing a continuing professional development programme for designers. At the same time, a new or existing award should be set as the highest national award for design excellence, and be formalised to an international standard.

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[8] Some industry and professional associations in Singapore include: the Designers' Association Singapore, the Singapore Institute of Architects, the Society of Interior Designers, the Accredited Advertising Agents Association, the Singapore Furniture Industry Council and the Textile and Fashion Federation.

Like the famous Compasso D'Oro, the top design award in Europe, the exhibits can automatically form a new collection of Singapore designs.

Strategy 3: Position Singapore as a Global DESIGN HUB

This strategy seeks to galvanise design-centric enterprises and organisations, design expertise and design educational institutes in Singapore so as to establish Singapore's reputation and position as a design hub.

Inward Investment
- Attract & Anchor International Design Companies & Activities, including MNC design HQ functions, and international events

DESIGN HUB

Enterprise

Design Council

Education   Expertise

Outward Promotion
- Embark on a National Marketing & Branding Strategy, including showcasing Singapore design abroad

Recommendation 3.1: Establish a National Design Council

While many components of a design ecosystem are in place in Singapore, there is still a need for a central organisation at the national level to champion the design cluster and synergise the activities and concerns of the various players. It is therefore recommended that a National agency for design be set up with representation at the highest level for industry, the design community, education institutions and the public sector. Such an agency would also allow Singapore to tap into the international design network, and with the other national design councils and organisations[9]. This agency would therefore be positioned to (a) forge links as the one-stop contact for design both locally and internationally; (b) nurture the local design industry; and (c) champion design excellence in Singapore.

Recommendation 3.2: Anchor International Design Companies and Activities in Singapore

To further grow Singapore's design capabilities, over and above nurturing local design expertise, it is proposed that we attract and anchor key international design firms to Singapore, as well as MNCs to locate their design functions and headquarters in Singapore. The latter would also allow us to better capture the full value of design in Singapore. In addition, while we develop a national award and local design events to international standards, it is recommended that we identify and actively seek to anchor at least one major international design award in Singapore, as well as to host international design conferences. This would allow Singapore to feature prominently in the international design network as a design hub.

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[9] Design Councils are well established in countries such as the UK, Spain, Denmark, Finland and Germany, and are partially funded by the government. Hong Kong has recently established a Design Centre to pull together previously fragmented efforts to develop design, and as part of the Government strategy to increase the level of innovation, to develop higher value-added products and services and nurture a creative skills base.

Recommendation 3.3: A National Marketing and Branding Strategy

Singapore has mainly used Expos and World's Fairs to promote its tourism but, unlike many countries, not fully exploited the opportunity to showcase its design efforts and profile its visions and challenges. It is recommended that Singapore's participation at such international platforms be carefully planned to advance the profile and visibility of Singapore's design capabilities and facilitate networking. It is further proposed that the promotion of unique Singapore design, products and services abroad be synergised with a national marketing and branding effort. This would require us to embark on a national branding strategy, with the involvement of the private, people and public sectors, to present a compelling and consistent Singapore story and brand.

Strategy 4: Foster a DESIGN CULTURE & Awareness

Recommendation 4.1: Embed Design in All Levels of Education

As design brings together arts, business and technology, design concepts and processes serve as problem solving tools, but more importantly, help to unleash students' creativity and develop a creative outlook. The taskforce proposes that design concepts and design as a tool be embedded to enhance the teaching of subjects such as art, business, engineering, communications and IT at the schools, polytechnic as well as university levels. This would help raise the level of design awareness and at the same time enhance the teaching in existing curriculum and courses.

Recommendation 4.2: Bring Design Everywhere

To raise public awareness on the significance of design and help foster a design-sensitive culture, it is proposed that a variety of design events and exhibitions be organised.
(a) Community level: the regular showcasing of design (both Singaporean and international), leveraging on the extensive museum and library network of the National Heritage Board and the National Library Board, as well as in community spaces, schools and shopping malls.
(b) Specific Groups & Issues: workshops, conferences and exhibitions targeting specific groups or organised around specific themes. This takes the example of the "Design-in-Business Week" or the "Design-in-Education Week" organised by the UK Design Council.
(c) National Level: It is further proposed that, to register the importance of design for Singapore's continued competitiveness, to designate a "Design Singapore" Year, to coincide also with the national marketing and branding strategy.

Recommendation 4.3: Design in the Mass Media

A key player in the design ecosystem, most clearly seen in countries such as Italy, Japan and USA, is the media – where journalists and various media platforms play a central role in promoting design both locally and globally. It is proposed that an active media programme be pursued to raise the profile of design.

CHAPTER FOUR:
MEDIA 21

INTRODUCTION

This chapter considers the state of the media industry and identifies the challenges and opportunities for this sector to contribute more significantly to Singapore's economy. It spells out the vision and strategies to develop Singapore into a vibrant global media city.

CURRENT STATE OF MEDIA INDUSTRY

Global spending on entertainment and media in 2001 exceeded US$1 trillion and is expected to grow to US$1.4 trillion in 2006 at a projected compound annual growth rate (CAGR) of 5.2%[1]. Within this sector, media industries (TV - satellite, cable and station - and filmed entertainment) are expected to perform well with a projected CAGR of 6%. Media spending in the Asia Pacific was estimated to be around US$215 billion in 2000 and it is predicted that the region will experience a healthy growth of 5.3% on a compound annual basis.

The key drivers of growth of the global media industry are:

(a) an increased demand for knowledge, information and entertainment spurred by the knowledge economy;
(b) growth of broadband networks and usage which has created large highways on which attractions (or media content) can be developed and marketed; and
(c) technology advancements, particularly digitisation, which have transformed the whole value chain of the media industry.

Domestically, the value-added of the media sector grew at an annualised rate of about 7.7% from $1.2 billion in 1990 to $2.6 billion in 2000. This contributed to 1.6% of the GDP in 2000. Media exports have been weak, but gradually improving: export figures grew from $631 million in 1990 to $908 million in 2000 at an annualised rate of 3.7%. The media sector comprised more than 3,500 establishments, employing a total of 37,000 employees.

Singapore's traditional approach towards the media has been focused on content regulation for social relevance and national interest. Previous industry development

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[1] Source: *PriceWaterhouseCoopers* "Global Entertainment and Media Outlook: 2002-2006

efforts have succeeded in attracting foreign media players to Singapore. However, these players have largely used Singapore only as a distribution base: Singapore is the regional distribution base for 16 of world's major satellite TV broadcasters and some 200 publishers.

There has been little investment at the higher end of the media value chain, namely the creation, development and financing of media copyrights. In the case of broadcasting, Singapore's production industry is valued at US$118 million, or US$121 million less than Hong Kong, US$170 million less than Australia, and billions less than Germany, UK and US. Local content forms a mere 33.8% of total programming, compared with 50% for Australia and over 60% for Germany, Hong Kong and the UK[2].

The local film production industry generated around US$4.7 million with a combined broadcast/film talent pool of 3,623. Canada, in comparison, produced an estimated US$2.95 billion and generated 46,000 full-time direct jobs in the film industry. Canadian film exports reached US$1.3 billion. Australia produced US$1.16 billion with a manpower pool of 34,200. Hong Kong's film exports amounted to US$70 million, generated by a manpower pool of over 5,000[3].

Despite the relatively small size of the local media industry, we have had our share of success stories. Local artistes in the music industry, such as Kit Chan, Stephanie Sun, and Tanya Chua, have established themselves as credible artistes in the region. Song writers such as twin brothers Paul Lee Wei Song, Peter Lee Si Song and Dick Lee have been composing songs for top Taiwanese and Hong Kong artistes[4]. Many local TV productions have won international awards[5]. With the formation of the Singapore Film Commission, the film industry is witnessing a notable revival following decades in the doldrums. These achievements point to a new confidence that Singapore can build a thriving media ecosystem to capture new opportunities and generate new value.

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[2] Source: Spectrum study 2001, Zenith Media.
[3] Source: PriceWaterhouseCoopers, SFC Commissioned study, 2001.
[4] Paul and Peter Lee are joint directors of the Lee Wei Song School of Music. Between them, they teach, produce, write and sing Mandarin and Cantonese songs. Peter Lee won the Best Composer Award in Taiwan's Golden Melody Awards, while his student, Stephanie Sun, won the Best Newcomer Award (2001).
[5] Many of the SBA-funded PSB programmes have attained international and regional recognition, which testifies to the high standards set by our local TV production industry. These include awards from the acclaimed New York Festivals (*Third Age, Go Green, Big Q, Virginity – Price or Prize, Downs Syndrome - I am Stephen* and *Millennium Challenge: Vietnam)*, US International Film & Video Festival *(Kau Istimewa (Extraordinary People) and Klinik Kita (Our Clinic))* and Asian TV Awards (*Gateway Asia – The New Asians (The Filippinos), Kids United, AlterAsians* and *48 on Aids).*

SWOT ANALYSIS

Strengths

- We have an educated and skilled workforce, complemented by a friendly business environment, good infocomm infrastructure and global infocomm connectivity.

- We are already recognised as a good regional base for the distribution of satellite TV, recorded music and publishing. Major global media players and satellite broadcasters have established regional bases in Singapore. We have two local players, namely, Singapore Press Holdings, which has an annual turnover of over S$1 billion in FY 2001, and the MediaCorp Group, with an annual turnover of S$423 million. Both these companies perform the full value chain of activities from film and TV production, to publications and online content.

Weaknesses

- We have a limited domestic market size. Our advertising market is only US$412 million, compared with China's US$5 billion and Hong Kong's US$1.8 billion (**Table 1**). The implication is that growth will have to be derived from hitherto untapped areas, or from exports.

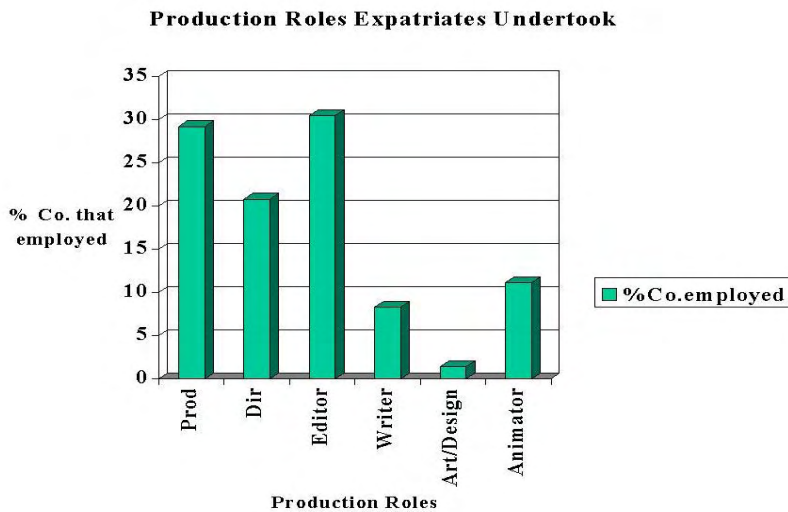**Table 1: Asia Pacific Advertising Per Capita Jan-Jun 2001[6]**

Countries (in order of size of ad pie)	Advertising (US$m)	Population(m)	Advertsing per Capita (US$)
China	5,354	1,267	4.23
South Korea	2,126	46.9	45.33
Hong Kong	1,810	6.8	266.18
Australia	1,497	19	78.79
Philippines	633	75.8	8.35
Thailand	573	61.1	9.38
Singapore	412	3.9	105.64
Malaysia	386	22.7	17.00
Indonesia	334	22.7	1.60
New Zealand	339	3.8	89.2

- We face a shortage of local creative manpower, such as above-the-line (director, producer, scriptwriter, director of photography, key cast) talent. **Chart 1** below shows the key roles expatriates were employed in[7].

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[6] Source: AC Nielsen Adex, Asia Pacific Market & Media Fact 2001
[7] Survey of manpower needs of the TV and film industry, NTU (2001).

Chart 1: Key Media Roles that Expatriates were Employed In

Production Roles Expatriates Undertook

A bar chart titled "Production Roles Expatriates Undertook". The vertical axis is labeled "% Co. that employed" ranging from 0 to 35. The horizontal axis is labeled "Production Roles". The legend indicates "%Co.employed". Approximate values by role:
- Prod: ~29
- Dir: ~20
- Editor: ~30
- Writer: ~8
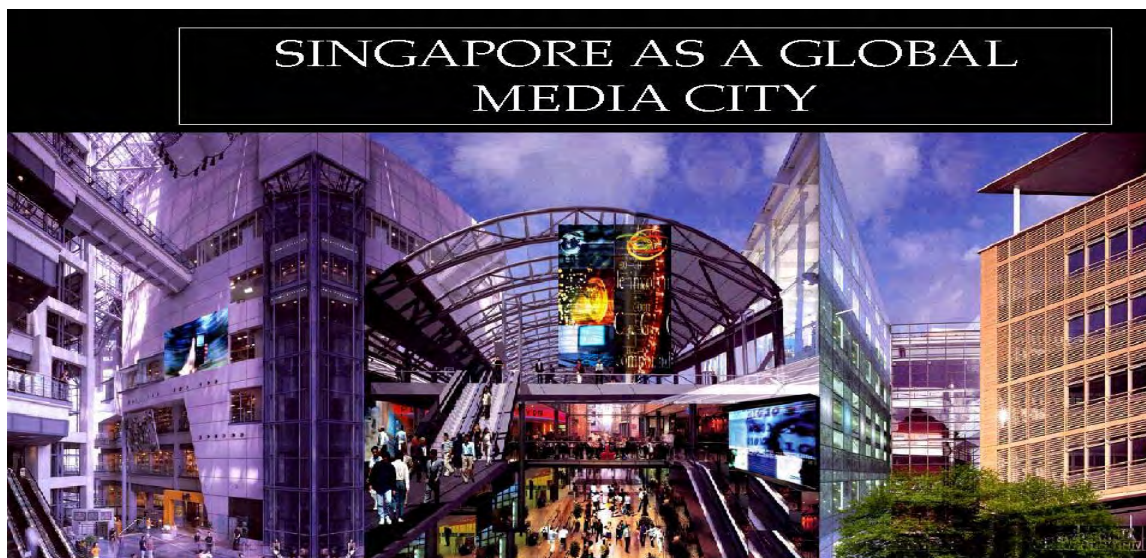- Art/Design: ~1
- Animator: ~11

Opportunities

- The global conversion to digital production and distribution presents an opportunity for Singapore to carve a niche, as we have a ready pool of computer science graduates. The challenge is to attract and train them to serve the needs of global media players.

- Our multicultural and multilingual talent base is a largely untapped advantage in the media sector. Foreign companies are keen to exploit the anticipated growth in China's demand for media and entertainment. Singapore has the potential to establish itself as a gateway for media content.

- While it remains difficult for media companies to secure financing from banks and private investors due to the current inability to assess the chance of success of a media project, the strong financial sector could potentially provide the financial backing for local media companies to experiment and venture into bigger projects.

Threats

- Regional governments also have plans to develop media hubs, which threaten to draw resources (talent, investments, etc) away from Singapore. For example, Australia is pursuing an aggressive plan to develop screen content and to attract foreign investment in film production. Hong Kong, Taiwan, South Korea and increasingly, China are attracting media businesses. The growth of rival media hubs and the ease with which media businesses can relocate their operations indicate an urgent need to widen the breadth and scope of our media ecosystem.

Media 21 envisions Singapore as a global media city, a thriving media ecosystem with roots in Singapore, and with strong extensions internationally. Economic value is derived from being a trading centre for copyrighted media material and from specialising in high-end media development. Media 21 also envisages made-by-Singapore media products that travel successfully overseas. Local media companies benefit from the overall levelling up of industry standards and are able to compete more effectively against foreign content to retain Singaporeans' hearts and minds.

Media 21 embodies a paradigm shift from the perception of the media as a mere means of mass communication to an inter-dependent ecosystem of the full range of media industries, from traditional print and broadcasting to the wider creative industries, such as film and publishing, to new areas of convergence such as digital and online media. Within each industry is a whole cluster of activities ranging from content production and distribution (including pre-production, production, post-production, packaging, marketing and distribution), enabled by IT and technology and fuelled by business opportunities and entrepreneurship.

Specifically, Media 21 envisions the following 10-year targets:
a) Increased economic significance of the media sector from 1.6% to 3.5%[8] of the GDP;
b) Increasing the total export value fivefold from S$908 million[9] to S$4.5 billion;

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[8] This requires that the media sector's contribution to GDP increases to 7.5%, assuming a GDP growth of 4%.
[9] This assumes an annual growth rate of 6%. Between 1990-95, exports grew by 12.9% without significant government support.

c)   Growth of at least 3 local media companies with offshore revenues exceeding S$250 million[10].

STRATEGIES AND RECOMMENDATIONS

The key approach is to capitalise on Singapore's existing strengths in order to level up and leapfrog our competitors. Media 21 proposes 5 strategic thrusts:

1.   Develop a State-of-the-Art Media City
2.   Position Singapore as a Media Exchange
3.   Export Made-by-Singapore Content
4.   Augment the Media Talent Pool
5.   Foster a Conducive Regulatory Environment and Culture

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[10] Some potential Media Singapore Inc companies initially identified include: Singapore Press Holdings (including SPH Media Works), Times Publishing, Media Corporation Ltd (including Raintree Pictures and MediaCorp TV), Cathay Holdings Pte Ltd, ST Telemedia and Singapore CableVision.

Strategy 1: Develop a State-of-the-Art MEDIA CITY

Several "media cities", or specific geographic zones earmarked for media companies, have sprouted over the past year. These include Seoul's Digital Media City, Dublin's The Digital Hub and Dubai's Media City. These "media cities" have allowed the governments to focus marketing and development efforts and to create a "cluster" effect by co-location of companies across the media value chain. The common characteristic among these projects is the commitment of government resources (including funds) to develop and market these specific areas and to incentivise companies and selected institutions to locate there.

Global Media Cities

- Dubai Media City (DMC) is spread over 200 hectares of land. It is established by the Dubai Technology, E-Commerce and Media Free Zone Authority. DMC is the personal project of the Crown Prince to develop Dubai into a global media hub by providing infrastructure and synergistic environment for media companies, from Dubai city and international communities, to operate. DMC also aims to offer world-class living options to professionals working in the media environment. DMC is creating an innovative concept providing a complete 'live-work-and-play' environment.

- **Seoul City's Digital Media City (SDMC)** was conceived as a specialised innovative complex with the specific vision to evolve into a world-class production centre for digital media contents and to be a world-class centre of academic-industrial cooperation in digital media technology. With a size of 560,000 square metres, SDMC is a one-stop service to Korean and foreign businesses and investors. It will lead Seoul's economy and will serve as the gateway linking Seoul to East Asia and the rest of the world, in 2010 when the project is completed.

Recommendation 1.1: Develop Mediapolis @ one-north

We recommend the creation of a media city to capture public and industry imagination, to re-brand our media industry and to underscore government commitment to develop this sector. We have identified JTC Corporation's one-north as the ideal location as it embodies a visionary plan for a state-of-the art work, live, play and learn environment for media and infocomm companies, and the artistic community.

"An organisation like Mediapolis is very important as it can provide us the whole environment to integrate training, marketing and managing."

Lee Yong-teh
Chairman, Trigem Computers

Mediapolis@one-north will be differentiated from other media cities by its emphasis on digital media creation and experimentation, futuristic design, its state-of-the-art facilities and infocomm and financing infrastructure, its competitive pricing and the co-location of ICT companies, creative media industries and a vibrant R&D community.

In particular, we have identified the need for a digital media lab (Recommendation 1.2), a digital production studio (Recommendation 1.3) and a TV broadcasting station as ideal key tenants at the Mediapolis. The soon-to-be formed Media Development Authority (MDA) will also be located at one-north to provide one-stop

industry concierge and facilitation service to media companies both at one-north, as well as in other parts of Singapore.

We recommend the endorsement of Mediapolis@one-north as the icon of Singapore as a visionary Global Media City. Government agencies (such as EDB, JTC, MDA and Infocomm Development Authority (IDA)) will adopt a collaborative strategy to attract a cluster of creative and hi-end media companies, and promote digital research and development.

Recommendation 1.2: Enhance Applied Research in Digital Media

The major trend in the media and entertainment industry is the shift to digital technology across the value chain, from production and user interface to distribution and storage. For broadcasting and new media, digital technology enables interactivity e.g. interactive TV, multi-user gaming, T-commerce, as well as new consumer experiences and devices. In film and TV production, digital technology has changed the way films are created. There are now films with

> "Every medium, from print to film, is screaming out for unique digital content that can be called fine literature. I believe that the emergent order will be the inevitable result of efforts by artists rather than technocrats."
>
> *Roy Stringer*

fully computer generated images without physical sets or human actors (e.g. *Toy Story, Walking with Dinosaurs, video games),* and productions with strong digital effects (*Lord of the Rings, Harry Potter movies, Star Wars Trilogy, Buffy the Vampire Slayer).* Digital productions typically garner over 50% of a total film/TV budget for the former category, and between 20% to 30% for the latter category.

One implication of the shift to digital technology is the increasing demand for innovative applications, services and devices. Singapore can capture this growing demand by anchoring a strong applied R&D laboratory such as MIT's Media Lab in Singapore. This will create significant value for Singapore in terms of a dynamic flow of talent and ideas, opportunities for our research talent and indirect benefits of attracting foreigners (top media research talent, business partners) to Singapore and an enhancement of Singapore's branding as a Global Media City.

Moderate government investment and strong government backing will be necessary to establish a successful R&D centre like the Media Lab at MIT[11]. One way in which Singapore can add value to media R&D might be to capitalise on our expertise in Asian languages and translation capabilities as well as our knowledge of Asian culture with a view to developing applications tailored to the Asian market.

Recommendation 1.3: Specialise in Digital Post-Production

Currently, Singapore does not have the facilities or capability to support the digital production/post-production requirements of an international big-budget film. We

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[11] We understand that the total cost to establish a digital media lab is about US$35 million with a recurring operational cost of approximately US$45million and that MIT Media Lab is interested in locating a "satellite" lab in Asia, in addition to the original one in the MIT campus, a branch in India and a new site in Dublin.

should address this critical area in view of the anticipated demand once Singapore becomes an Media Exchange.

Specifically, we recommend the following:

a.   Establish a multi-disciplinary digital post-production studio capable of supporting computer animation and a virtual film studio. Currently, Singapore lacks a state-of-the-art digital post-production facility to support an effects-heavy film like *Lord of the Rings*; filmmakers have to go to Thailand or Australia for post-production. There is an urgent need for a studio with state-of-the-art equipment to support the targeted volume and quality of production;

b.   Attract high end post-production companies to Singapore by extending Pioneer Status to this group of companies; and

c.   Augment talent and skills in digital post-production.

Recommendation 1.4: Expedite National Deployment of Digital Media Services

To support the digital media investment thrust and the positioning of Mediapolis as a test-bed for new media services and devices, we recommend accelerating the nation-wide digital TV (DTV) rollout and the deployment of digital TV services, content and applications. We will also need to incentivise R&D in enabling software and technologies through seed funds and facilitate industry wide training of DTV manpower through schools, seminars and conferences. We can also establish Asian chapters of international standards bodies, like DVB and W3C, in Singapore.

Strategy 2: Position Singapore as a MEDIA EXCHANGE

Historically, Singapore has played a role as a trading port for rubber, even though it was not a major source of rubber. Similarly, strategy 2 essentially combines media financing and copyright registration to enhance Singapore's attractiveness as a media exchange. This will enable Singapore to establish a strategic foothold in the creation and acquisition of media copyrights (films, TV and publishing), which is the new currency of the Knowledge Economy. This will generate direct benefits for the media industry as it taps on international ideas for new media products (films, new TV formats etc) and brings new opportunities for the financial and legal communities, as well as spillover benefits for the production and post-production sectors.

There is a current gap in the availability of funds to finance core copyrighted material in media, namely films, TV projects[12], and to a lesser extent written material**.** Film and TV budgets are increasing, from a few hundred thousand dollars in the past to over $50 million for a blockbuster film, and over S$50,000 for a TV production. Producers have been attracted to cities that offer lower cost financing options.

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[12] This is derived from strong feedback from international players.

Countries like Australia[13], Canada, the United Kingdom and even Malaysia and Thailand have been successful in luring Hollywood producers to fund and produce large scale film and TV projects through attractive tax regimes (see Annex 4.1 for a list of tax incentives and schemes of selected countries).

In the fifties and sixties, Singapore was a regional hub for the film industry; this position died out due to a variety of reasons[14]. Currently, despite Singapore's reputation as a regional financial centre, it remains difficult to secure financing for media ventures from private companies and financial institutions. Traditional financial institutions such as banks and venture capitalists hesitate to invest in media projects as they generally have no experience in assessing the risk of investments in such projects. This is compounded by the fact that the smaller media companies have problems securing bank loans due to the inability to provide company-owned assets as collateral.

We can capitalise on our position as a base for the world's major media companies and our financial position to carve a niche for Singapore as a financing and trading centre. To do this, we will need to make available in Singapore an attractive range of financing options, from equity funds, to investment and loan funds. The window to do this is small, as other burgeoning film/media hubs have already put in place and are constantly reviewing their tax incentives to attract investments in TV and films, thereby lowering Singapore's competitive advantage.

Recommendation 2.1: **Introduce Tax Incentives to Attract Media Investments**

There is currently no specific tax incentive to attract investments in media copyright production, which leads to minimal private sector investment in films and TV. To make Singapore an attractive media financing sector, it is recommended that the government introduces tax incentives to encourage private investment in the production of copyrighted material.

Specifically, tax breaks are recommended for investment in MDA-certified copyrighted material. The incentive will be tied to pre-qualifying conditions like specifying employment of a specified proportion of domestic labour or that a portion of the production must be done within Singapore, with specific definition of what constitutes production. Depending on the incentive package, the economic spin-offs include:

    a.   generating business and employment in other sectors (e.g. in catering, transport, carpentry for set construction, hotels, set/costume-designing, grips and gaffers);

    b.   development of the legal (intellectual property rights, contracts, etc), financial (loans, investments, venture capital) and insurance (completion bonds, etc) markets; and

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[13] According to a recent survey of LA-based film producers by the Australian Film Commission, 50% of rated tax incentives as a key consideration to move runaway productions to Australia. The other key consideration was the favourable exchange rate. Foreign productions now comprised over one third of the overall $331m (A$600m) expenditure in Australia, a rise of 139% over the last 5 years.

[14] This is no official record of the reasons why the film industry dissipated post independence. One key reason could be the gradual decline of indigenous SEA films.

c. revenue and employment for direct film/TV industry (producers, directors, actors, scriptwriters).

These incentives will help enhance Singapore's reputation as a centre for media financing and increase demand for post-production. This complements the strategy to specialise in digital media.

Recommendation 2.2: Establish a Loan Fund for Copyrighted Media Material

The Singapore government can also play the role of initiating and forming a Loan Fund, in partnership with private sector companies. Existing financing institutions are unable to fill this gap, as they lack the expertise to assess the risk of films and TV programmes. There is less politics and national pride surrounding financing, so there will be minimal political hurdles for Singapore to play this role. The loan fund will give Singapore an edge over our competitors who do not have such a scheme in place.

The objective is to attract copyright projects from the Asia-Pacific region to Singapore for financing. Funds will be loaned at a competitive rate, plus a share of profits. In the case of default, the borrower will transfer the copyright of the project to the loan agency. Overall risks to Singapore are low for the following reasons:
a. the default risks will be amortised over many projects;
b. an initial credit worthiness assessment would have been done; and
c. As long as the project is completed, there will be always be some returns/value (for example, it can be sold to content hungry satellite/cable companies hungry for content).

Industry representatives have given feedback that the loan fund must have at least US$200million to make an impact. The government does not need to provide full funding, as private companies have expressed interest in such a venture. The assessment is that government would need to set aside at least 25% of the initial fund, which can eventually be self-financing.

Recommendation 2.3: Attract Media Finance Companies and VCs

We recommend attracting specialised media finance companies and venture capitalists to base their operations in Singapore. This is linked to the overall strategy to attract media companies to Singapore for financing, as finance companies and venture capitalists will only consider Singapore if there is a vibrant media industry to support their business.

Recommendation 2.4: Create and Manage a Registry of Media Copyrights

Currently, unlike US where Intellectual Property Rights (IPR) laws are well established, it is extremely difficult for companies to determine who owns the copyright to each aspect of the media product, in which country/city or which window

the copyright is owned. There is no central agency that maintains such information. Industry representatives have given feedback that Singapore's reputation as a corruption-free state, with a transparent judicial system, stands us in good stead to establish Singapore as a trustworthy and reliable base to set up a copyright register. The objective is to encourage companies to obtain IPR registration in Singapore, and tap on Singapore's judicial system to seek redress for infringement. MDA will further study the feasibility of this recommendation together with the Intellectual Property Office of Singapore (IPOS) and industry bodies.

Recommendation 2.5: Grow Media Markets @ Singapore

Currently, the various broadcast, film and publishing events are peppered haphazardly throughout the year. Very little trade in films and TV are done in Singapore. In Asia, Hong Kong is attempting to grow its Hong Kong Film Mart. We recommend creating focal events, or, more specifically, media festivals incorporating media markets in partnership with established international markets. The aim is to attract trade professionals, buyers and sellers to Singapore over 7–12 day periods. We aim to make Singapore's media festivals the must-attend events for those who matter in the media industry. We also recommend establishing Media Awards of a level of prestige as to be meaningful and significant. Awards serve to recognise talent, spur competition, and enhance the glamour of the industry. Once established, the awards will also enhance the value and marketability of the award-winning content/talent.

Strategy 3: Export Made-By-Singapore CONTENT

The development and sale of copyrighted material (films, TV programmes, books, multimedia content) is the raison d'etre of the media industry and serves as the underlying engine to drive the media industry. Singapore's content development efforts have largely focused on the domestic market, to serve the needs of the domestic audience. This focus has resulted in content that tends to be colloquial and not tailored to the export market.

> "Why build pipes if you don't have anything decent to put down them?"
>
> *Peter Bazalgette*

Focusing on the domestic market has had two implications. First, the potential market size, and consequently the operational budgets is limited. For example, a one-hour local drama would average S$60,000 whereas a comparable UK drama would enjoy a production budget of around S$1.2 million[15]. Second, the economics of the global media market is such that international players are able to amortise their costs across large markets. For example, a local TV production may cost up to S$60,000 to produce, whereas an equivalent foreign production would cost only $3,000 to acquire.

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[15] This includes cost of living and exchange rate differences.

The way to overcome the limitations of the small domestic market is to create content specifically for export. Given our small talent pool, we will need to adopt a collaborative approach that embraces foreign partners and talent. Content need not be made entirely in Singapore, or entirely by Singapore-owned companies or talent. This practice is not new. The Singapore Broadcasting Authority (SBA) has initiated co-production agreements with Canada and Japan with the aim of tapping on the funds, talent and distribution networks of these overseas counterparts.

Recommendation 3.1: Establish a Content Development Fund

Countries such have Australia and Canada have complementing tax incentives with funding schemes (**Annex 4.2** gives a description of the various schemes in place in selected countries). We recommend the establishment of a content development fund, initially for films and TV. The objective of the fund is two-fold:

    a.   To boost the range and quality of local films and TV for export. Collaboration with foreign partners and use of foreign talent will be needed to bridge the talent shortage. Hence, projects need not be fully Singapore-owned or produced entirely in Singapore. Local companies can tap on the content development fund and work with foreign partners to produce TV or films; and

    b.   To increase the range of financing options for media companies as part of the strategy to position Singapore as a Media Exchange.

Currently, the total budget for TV and film productions is S$2million per year[16]. To build up a credible local TV and film industry, we will need to build up a minimum pool of S$50million per year[17]. As the aim is to develop content that can be sold in the wider international market; funding proposals should be required to incorporate marketing and distribution, in addition to content creation and production.

Recommendation 3.2: Develop Niche Genre

We should capitalise on our competitive strength to develop genres with a higher chance of international success. We have initially identified 3 potential genres: education, business, documentaries and digital animation. There is growing demand for educational content, particularly demand for language education (esp English to the Chinese market), pre-school and academic content. However, we have not been able to tap on the rich pool of educators, as there is no incentive for them to be involved in media development.

Two other genres which Singapore can specialise in are business content and documentaries. The market for business information was US$69 billion in 2001, and is projected to grow at a compound annual rate of 5%. The economy is expected to play a key role in this development, with dampened demand in the near term but

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[16] This comprises SBA's S$1 million co-production budget and SFC has a total budget of S$5 million over 5 years. The amount excludes Public Service Broadcast funding of S$100 million for national and non-commercially viable programmes.

[17] Source: PWC Consultancy Study for the Singapore Film Commission.

propelled spending upon recovery and as China's market opens. We can tap on the pool of knowledge and talent (business and financial analysts) in Singapore to develop this genre. CNBC and Bloomberg currently draw on a healthy pool of local talent to staff their business news programmes[18]. We also have a pool of producers with experience in producing documentaries, which can be nurtured to develop content for export[19].

Digital animation, with a total value of US$25.4 billion in 1999, is another niche genre for which Singapore can carve out a niche, given our strong IT skills base. A subset of this is video gaming, which had a global market size of US$3 billion in 2001.

We recommend that the Ministry of Education (MOE) considers incentives including allowing teachers to receive royalty payments for copyrighted work, and consultancy payments for advisory roles in media projects.   We also recommend developing these genres through allocation of the content development fund (Recommendation 3.1), training and development schemes as well as collaboration with strategic overseas partners to boost the quality and exportability of these genres.

<u>Recommendation 3.3</u>: **Increase Bilateral Co-Production Agreements**

The government can help open doors for local companies to partner foreign players by signing agreements with targeted overseas governments. This will pave the way for local companies to enter into joint ventures and co-productions with foreign players. This will also give them access to foreign production expertise, funds, and more importantly, foreign distribution networks and markets.

<u>Recommendation 3.4:</u> **Increase Exports Promotion**

MDA could work in partnership with IE Singapore and SPRING Singapore to strengthen export promotion of media products and services. For a start, this can include leading missions overseas to give local players more exposure and to facilitate trade. MDA can also facilitate the setting up of promotional booths at key international media events such as MIPTV and MIPCOM (France)[20] for broadcasting as is done presently by SBA or help good films gain entry to key film markets and film festivals.

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[18] Bloomberg employs 137 staff, of which 112 are local. CNBC employs 173 staff of which 136 are local.
[19] The market size for documentaries is not available, but has not been identified as a key growth market.
[20] MIPTV and MIPCOM are premiere global TV markets and Sundance is the premiere film festival for independent films.

Strategy 4: Augment the MEDIA TALENT POOL

Recommendation 4.1: Establish a Media Academy

The key training needs in traditional electronic media are scripting, directing, camera work, sound, lighting and video editing. We recommend the establishment of a Media Academy in collaboration with international media schools to train professionals in broadcast and film. This is a gap not currently filled by existing educational institutions. The academy will be a breeding ground for both local and foreign broadcasters and production companies to spot and attract creative talents. The availability of good talent will initiate a cycle of attracting employers (foreign broadcast companies basing their production operations in Singapore), raising the profile, and thereby attracting more talent. The Academy could work closely with industry to identify the skill requirements and collaborate with the Digital Media Institute for digital media skills development.

Recommendation 4.2: Enhance Specialist Skills

We should develop core competencies to support content development. In particular, we should focus resources on enhancing creative writing skills, the art of drawing and illustrating and across all media. SBA has started a National Scriptwriting Masterclasses and competitions for broadcasting scripts. This should be expanded to writing for various categories of media, including publishing, film and new media. Competitions will be an avenue for budding scriptwriters to gain

> "*There is no art without business. And to that end, it is imperative that the artistic youth...can find a venue and find a commercial outlet through media and film and TV production.*"
>
> Richard Taylor

national and international recognition. The entry scripts can also serve to inspire more and better ideas for new scripts. Separately, MDA will need to work with industry, seminar organisers and the Media Academy to organise specialist training in other skills including media financing and intellectual property rights.

Recommendation 4.3: Create Opportunities for Exposure to World's Best

Owing to our small domestic market and our relatively short history, local media industry players lack exposure and experience to be able to build a credible portfolio. To help overcome this shortcoming, we will need to engage academic institutions (like the NTU School of Communications and the polytechnics) and the industry to develop apprentice and other schemes for young talent to work with both local and foreign professionals in and out of Singapore. These will allow the local practitioners to learn from the world's best, and to help them master their craft.

Recommendation 4.4: Embed Media Training into School Curricula

At a fundamental level, MDA should work with MOE to enhance creative writing and drawing skills at pre-school, primary and secondary levels. This can be incorporated into language and literature curricula, to build up creative writing and story telling and story boarding skills. At secondary and tertiary levels, videography and graphics skills training can be developed to enhance project work.

Recommendation 4.5: Enhance Knowledge of Intellectual Property Rights (IPR) and Digital Rights Management Tools

The key to maximising the return on investment in original creation is the ability to export content and to deliver content on multiple platforms. The acquisition and protection of intellectual property is therefore vital to retaining the value. Many in the media industry are not well-advised in this area. MDA should conduct training and consultancy to help enhance industry knowledge of the complexities of IPR laws and protection as well as the latest developments in digital rights management tools.

Strategy 5: Foster a CONDUCIVE REGULATORY ENVIRONMENT and Culture

Recommendation 5.1: Ensure Policies and Procedures Meet International Best Practices

A conducive regulatory environment is critical for businesses to flourish. In order to be recognised as a global media city and attract global players, MDA will need to ensure that its regulatory policies and business practices meet international best practices and can stand up to international scrutiny. For example, in developing a framework to foster healthy competition, MDA must draw on international experiences and formulate a framework that is consistent with global practices, whilst adapting the local context where applicable.

Recommendation 5.2: Ensure Regulatory Consistency and Clarity

MDA must aim to streamline various regulations and standards for film, TV, radio, publications and new media so that the rules across the spectrum are clear and consistent. It would need to constantly review regulations and engage in industry and public consultations to ensure that regulations are relevant. MDA would need to ensure that regulatory policies and content

"You have a brand problem around society and control....US is getting more conservative on these issues while Singapore is getting more liberal... There is an opportunity to reverse the brand of Singapore. This could have secondary economic impact... America is looking at Singapore society closely to see how balance can be struck between being open and closed."

Paul Saffo

standards do not stymie creativity, whilst maintaining social harmony in Singapore.

Recommendation 5.3: Facilitate a Production-Friendly Environment

To make Singapore an attractive place for content development, MDA would need to work with various agencies to streamline rules and regulations to facilitate location shoots.   One possibility is to create confined production-friendly locales such as Sentosa or the offshore islands where constraints on production shoots and stuntwork can be minimised.

> *"Production crews can't film a crime scene on the streets without needing to seek numerous permits and approvals from various authorities, only to be told after several weeks that they are not allowed to do it. To make Singapore an attractive place for media companies, MDA will have to create a 'production-friendly' environment in Singapore."*
>
> Extract from Media Roundtable Report

Recommendation 5.4: Encourage Industry Responsibility and Responsiveness

To complement the push to streamline regulations and create a conducive business environment, MDA should encourage the formation of industry associations where where is sufficient critical mass. Such associations will enable industry practitioners to undertake more responsibility for industry skills upgrading and adopting good conduct practices. Such associations can also serve as a channel for constructive feedback to government for public policy formulation. To facilitate the formation of such associations, MDA could consider providing seed investment to ramp up initial operations.

Recommendation 5.5: Increase Public Education and Empowerment

In the multi-channel, globally networked media environment, regulations alone are insufficient and increasingly ineffective to safeguard the young against offensive and undesirable content. MDA must double its efforts to educate the public on tools and tips to safeguard against undesirable content. It must also explore new ways to empower the public e.g. through the introduction of content classification systems and content management tools.

Parents Advisory Group for the Internet: PAGI partners the Internet industry and government agencies to promote safe surfing and educate parents about online safety.

Internet Content Rating Association ICRA is a rating system designed to protect children from potentially harmful content. It is backed by the biggest names online.
Content Management Tools Various tools have been developed to help empower audiences. For example, TV ratings help parents identify inappropriate programmes according to a child's age or unsuitability due to sex, violence or adult language. The V-Chip can help parents "screen out" the programs with TV ratings they don't want their children to watch. The V-Chip is already built into new TV sets -- parents who want to use it just have to turn it on when they set up their new TV.

WORKING TOGETHER TO TRANSLATE VISION INTO ACTION

Currently, the creative cluster in Singapore has not been recognised as an area deserving of a national policy strategy and state investment. While MITA and her agencies, together with EDB, STB, IE Singapore and MOE have served to develop the arts and culture in Singapore over the years, policymaking, developmental and promotional programmes are frequently conducted on a fragmented basis.

To develop Singapore's creative cluster, a national concerted approach must be adopted to involve all players with vested interests. MITA could be tasked to spearhead the co-ordination and development of the creative cluster, whilst garnering support from other government agencies in a Singapore Inc. manner. Besides MITA and players in the creative sector, the following partners should be involved:

- Ministries and statutory boards involved in tourism, education, manpower planning and development, economic development, trade, transportation, urban development, housing, finance, law, community development etc (i.e. STB, MOE, MOM, MTI, EDB, IE Singapore, SPRING, JTC, LTA, MND, URA, HDB, MOF, Minlaw, MCDS)
- Educational institutes at all levels
- Technology companies which see in the creative sector opportunities for new product development and markets
- Businesses from outside the creative sector that employ creative workers, hire creative services or enjoy the benefits of a rich cultural scene for recruitment and retention purposes (i.e. Singapore Business Federation as key partner)
- Financial institutions and investors (including venture capitalists) who recognise the unique financing needs and opportunities within the creative sector
- People Sector, such as People's Association, Community Development Councils, Non-Government Organisations, volunteer bodies and individuals, associations such as clans and expatriate bodies, etc

The national strategy will aim to achieve the following objectives:

- Raise awareness of the economic potential of the creative cluster
- Foster creative partnerships and collaborative strategies with the public, private and people sectors to promote the growth of the creative cluster
- Define and measure the economic impact of the creative cluster in Singapore, with benchmarking studies against other global creative hubs

> **Understanding the Creative Economy**
> Specific research initiatives could include:
> - Identify and track economic indicators of the Creative Economy, such as employment trends, economic value-add, exports, etc
> - Create a Creative Economy Index to benchmark against other countries
> - Generate issue papers on gaps and challenges impacting the development of the Creative Economy
> - Organise research conferences and forums

- Research on the key issues and challenges intersecting with the growth of creative industries
- Formulate and promote policies and programmes that will further the interests of a creative cluster
- Proxy for Government investment in the necessary resources required to nurture a creative cluster, such as funding, talent and infrastructure
- Promote dialogue and exchange among industry players within and beyond Singapore
- Facilitate collaborative exchange with government agencies / NGOs engaged in similar research and investment throughout the world

The National Collaborative Strategy has already been set into motion. For the past 8 months, MITA and its statutory boards have initiated a series of feedback sessions study missions and international advisory programmes to seek the advice of international experts and gather feedback from stakeholders. A listing of these platforms is provided at *Annex 1.3*. Since March 2002, EDB has also initiated a series of brainstorming sessions with agencies such as MITA, IDA, IE Singapore, NAC, SBA, STB and Singapore Sports Council (SSC) to discuss how a holistic approach could be adopted to align the various agencies' efforts in developing the arts, culture, entertainment and sports industries. We will continue to build on these efforts to bring the creative cluster movement to new heights.

CONCLUSION

This Creative Industries Development Strategy report presents a blueprint for Singapore to define its new competitive edge as we transit into the innovation-led economy. Moving beyond the traditional manufacturing and services industries, we need to identify new areas which are innovation-driven and offer excellent growth prospects and economic spinoffs. The creative cluster not only fits these criteria but can potentially change the whole texture of our economy by advocating the fusion of arts, business and technology, and inspiring creativity and innovation across all sectors of the economy – hence propelling the growth of the Creative Economy.

We must recognise that the successes of many international cultural hubs are supported by deep cultural capital and a high level of creative energy and passion residing within their people. Creative education and training are therefore the fundamental investments we must be prepared to put in before we can expect to see results. At the same time, we must catalyse a thorough transformation of our creative landscape to enable these creative people to flourish and to reap economic benefits from their works. This would require a total systems approach leveraging on the concerted efforts of our public, private and people sectors. The returns on investment may not be immediately visible nor measurable in the short term but when the Creative Economy does eventually take flight, our rewards will be immense.

CHAPTER ONE:
THE RISE OF THE CREATIVE CLUSTER

INTRODUCTION

Over the past four decades, Singapore has focussed much of its energy on strengthening its economic fundamentals. Its investment-led economic strategy has made it a dynamic and prosperous nation. However, globalisation, technology and competition are changing the global environment rapidly. The factors for success in the past can no longer apply. We have moved from the Information Economy to the Creative Economy, which exploits the knowledge, imagination and passion of individuals to create extraordinary value and wealth. The greatest resource of a nation is now the creative capacity of its people.

> "For many years, we concentrated on the economic side. But if you want the economic side to flourish, you need more entrepreneurs, you need more creativity. So, you must also look at the arts. The two must go together."
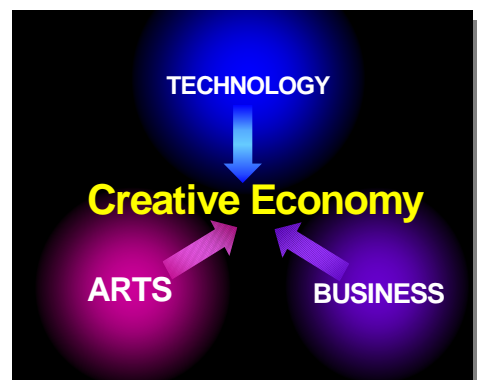>
> *Prime Minister Goh Chok Tong*
> *Asia News Network, May 2002*

Creativity
Definition – *"the ability to create meaningful new forms"*
Webster's dictionary

Prof Richard Florida, a regional economic development professor at Carnegie Mellon University argues that creativity is multidimensional[1]. The varied forms of creativity that we typically see as different from one another – technological creativity (or invention), economic creativity (or entrepreneurship) and artistic and cultural creativity – are in fact deeply interrelated. Not only do they share a common thought process, they reinforce each other through cross-fertilisation and mutual stimulation. Throughout history, practitioners of different forms of creativity have tended to congregate and feed off each other in teeming, multifaceted creative centers - Florence in the early Renaissance; Vienna in the late 1800s and early 1900s; and the many fast growing creative centres across the United States today, such as San Francisco and Boston.

This is why Singapore must embark on a journey of reinvention to look into how we can harness the multi-dimensional creativity of our people to become our new competitive advantage. This would entail a fundamental shift in the way people think about the link between the arts and economic growth. The fusion of arts with business and technology gives rise to exciting new possibilities in developing a Creative Economy to propel the economic growth of our nation.

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[1] The Rise of the Creative Class – and how it's transforming work, leisure, community and everyday life, Richard Florida, Published by Basic Books, 2002.

The creative cluster is a key contributor to the Creative Economy and can be defined as "those industries which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property".[2] These creative industries directly or indirectly produce cultural products and include not only commercial enterprises but also artists, public and non-profit organisations. Unified by the thread of cultural creativity, the creative cluster cuts across multiple economic sectors and does not constitute a cohesive or discrete sector in the traditional sense of an industry cluster. Hence, it has not, until recently, been recognised as a cluster in itself, requiring policy co-ordination and investment.

For the purpose of this discussion, we have categorised the creative industries into three broad groups:
- Arts and Culture
  - Performing arts, visual arts, literary arts, photography, crafts, libraries, museums, galleries, archives, auctions, impresarios, heritage sites, performing arts sites, festivals and arts supporting enterprises
- Design
  - Advertising, architecture, web and software, graphics, industrial product, fashion, communications, interior and environmental
- Media
  - Broadcast (inc radio, television and cable), digital media (inc software and computer services), film and video, recorded music and publishing

THE CONTRIBUTIONS OF THE CREATIVE ECONOMY

The Green Paper on "*Investing in Cultural Capital – A New Agenda for a Creative and Connected Nation*" drafted in March 2002 by the Cultural Agenda Taskforce comprising representatives from MITA, STB, EDB and MOM, provides detailed arguments and case studies on how the creative cluster benefits the economy and society (*Annex 1.1*). Some of the key ideas are summarised below:

National Competitiveness

- Direct GDP Contribution of the Creative Cluster

As we will show in the section on "The State of the Creative Economy", the creative cluster has tremendous growth potential in terms of GDP contribution, exports and job creation.

- Economic Revitalisation and Spinoffs

The creative cluster also generates significant economic spin-offs. In 1998, the multipliers for arts and cultural activities and design industries in Singapore were estimated to be 1.66 and 1.76 respectively. This was higher than 1.4 for the banking sector and 1.35 for the petrochemical sector. McKinsey[3] further validated that the arts and culture are an attractive public investment for states, communities and countries: the yields are high, the risks low and opportunities sizable. Strategic investors, who focus on the long-term outlook for an investment, will be impressed by the way that arts institutions can create jobs and serve as the core of economic as well as community revitalisation plans. For example, the Guggenheim Museum in

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[2] UK Creative Industries Taskforce, *Creative Industries Mapping Document,* November 1998.
[3] Arts for more than art's sake (Connecticut: McKinsey & Company, 2001).

Bilbao, Spain, boosted the local tourism industry with 2.6 million visitors in its first two years of operation and created over 8,000 jobs since 1997.

- ▪ <u>Differentiating products and services across all sectors of the economy</u>

The creative cluster can also be understood to have a critical impact on products and services outside the immediate cluster of creative industries. Technological innovation and keen competition have led to affordability and unprecedented access to new products and services. Today's winners derive their competitive edge from fusing technological innovation with product design, branding and marketing. Successful companies such as Sony, Samsung, Swatch, Apple and Nokia see design as a matchless opportunity to differentiate their products, and to build a gateway to the global marketplace where consumer needs and desires have become more sophisticated.

Attractiveness and International Image of Singapore

A vibrant creative cluster adds to the attractiveness of Singapore to global talent and businesses by raising the quality of life, contributing to a culture of pervasive innovation and raising the international profile of Singapore.

Creative People

The creative cluster can also enhance the development of our human capital. It offers new possibilities for our people to realise their diverse aspirations. Educators have also observed that students develop creative thinking through the arts and transfer that capacity to other subjects. When the arts are a strong component of the school environment, students achieve higher grades and better scores on standardised tests such as SAT, while demonstrating lower drop-out rates and absenteeism[4]. An arts education can also build specific skills that the business world values, such as goal setting, flexible thinking, tolerance, co-operation and teamwork, creative problem solving, self-confidence and motivation[5].

Individual Well-Being, National Pride, Community Bonding

Finally, the social value of the creative cluster must not be forgotten. Individual well-being, social capital, common values, national pride and community bonds are all reinforced by participation in cultural activities.

THE GLOBAL RACE TO DEVELOP THE CREATIVE CLUSTER

As the world awakens to the fact that cultural creativity can constitute a powerful economic force when fused with business and technology, there is now a global race to better understand and harness the economic potential of the creative industries at the city, regional and national levels. Just to cite a few examples, the UK, US, Europe, Hong Kong and Korea have all invested significant time and energy to define, measure and develop their creative industries. Some of their newest developments are summarised at *Table 1*.

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[4] Creativity, Culture, Education and the Workforce. (Issue Brief for "Art, Culture & the National Agenda" project by Centre for Arts and Culture, US, December 2001)
[5] Educating for the Workplace Through the Arts". A special supplement to Business Week, 1996.

Table 1: Summary Table of International Activities to Develop Creative Industries (Not Exhaustive).

Country	Highlights of Developments
UK	▪ A **Creative Industries Taskforce** was set up by Prime Minister Tony Blair in 1997 to investigate generic issues which impacted on the creative industries and to make recommendations for change in areas such as skills and training, finance for creative venture, intellectual property rights and export promotion. It provided a forum in which Government Ministers met with leading industry figures to analyse the needs of the creative industries and develop policy across government to ensure their value to the UK economy was sustained and developed. The Taskforce published **Creative Industries Mapping Documents 1998 and 2001**, which identified the activities and economic performance of each creative industry, their potential for growth, and the key barriers to growth. This work is now being carried forward by a **Ministerial Creative Industries Strategy Group**, which serves to ensure a co-ordinated response to the needs of the creative industries, acting as a "clearing house" for initiatives and action. ▪ A £200 million **National Endowment for Science, Technology and the Arts (NESTA)** was set up in July 1998 under the National Lottery Act. Its core objective is to "support and promote talent, innovation and creativity in the fields of science, technology and the arts". NESTA concentrates on individuals and small teams rather than institutions and companies, and helps to promote convergence of the science, technology and the arts by supporting areas that transcend the traditional boundaries.
US	▪ The New England Council is an alliance of businesses, academic and health institutions, and public and private organisations that serves to promote economic growth and a high quality of life in the New England region. It initiated **The Creative Economy initiative** in 1998 to demonstrate the dramatic impact of culture on the region's economy. Following its groundbreaking June 2000 report on "The Role of The Arts and Culture in New England's Economic Competitiveness", it proceeded to release a "Blueprint for Investment for New England's Creative Economy" in June 2001. The blueprint mapped out strategies to develop the creative cluster through policy formulation and program development. ▪ The Centre for Arts and Culture, an independent think tank, produced a series of briefing papers under the project title of "**Art, Culture and the National Agenda**" to highlight the economic and social contributions of the cultural sector and to urge the government to create focal points for cultural policies within the federal government.
Hong Kong	▪ In the pipeline are ambitious plans for an **integrated arts, culture and entertainment district** at a 40-Ha reclaimed site at **West Kowloon**, which will help Hong Kong fulfil its aspiration to be a world-class Events Capital. ▪ The business community has also recognised the economic importance of the arts. The cover story of the June 2002 issue of The Bulletin, a **Hong Kong General Chamber of Commerce** Magazine, focussed on how arts and culture could become an engine of economic growth for Hong Kong.
Korea	Since the late 1990s, Korea has undergone a paradigm shift to recognise the economic value of the cultural industries. This led to the following developments. ▪ Share of total **budget** of Ministry of Culture and Tourism for the cultural industries increased from 3% in 1998 to 16% in 2002. Primary objective of **cultural policies** shifted to focus on promoting the economic potential of domestic culture. A **comprehensive plan for developing skilled cultural workers** was published. ▪ The **Korea Culture & Contents Agency (KOCCA)** was established in 2001 to provide systematic support for the cultural industries. The mission of KOCCA covers the fostering of culture, training skilled manpower, facilitating exports and the establishment of a business infrastructure. Key areas being developed include animation, cartoons, music, characters, games, mobile and internet content. ▪ The Seoul Metropolitan Government is pursuing an ambitious project to develop a 565,000 sq m^2 **Seoul Digital Media City** (SDMC). SDMC is scheduled for completion in 2010 and will serve as a world-class complex for digital media industries focusing on broadcasting, films/animation, computer gaming, music and e-learning. SMDC is expected to create some 270,000 jobs and W16 tri (~ S$ 12 bil) a year.
Europe	▪ An innovative action research project called "**Banking on Culture**" seeks to investigate and stimulate new sources of financial investment for the cultural cluster in Europe.

THE STATE OF THE CREATIVE CLUSTER

Several countries, including US, UK and Australia, have made significant progress in their attempts to quantify the economic contributions of the creative cluster. The results of their groundbreaking work are summarised in **Table 2**, alongside local statistics extracted by the Singapore Department of Statistics using the Australian framework (More details on Singapore's copyright industries are enclosed in **Box 1**). As economic research on the creative cluster is a very new field, an international standard for creative industries has yet to be established. However the current findings already provide a hint at the vast promise of the creative cluster. The size of Singapore's creative cluster has been estimated to be around 3% of Gross Domestic Product (GDP) and currently lags behind that of US (7.8%), UK (5.0%) and Australia (3.3%).

GDP Contribution of Singapore's Creative Cluster
Depending on the methodology used, the current value of the creative cluster in Singapore has been estimated to be between 2.8% (2000 figure based on the Australian copyright industries methodology) to 3.2% (1999 figure based on the UK creative industries methodology).

Source: Singapore Department of Statistics

Phenomenal Growth
Since 1996 to 2001, the core copyright industries in US have grown nearly five times as fast as the economy as a whole.

Source: *Copyright Industries in the U.S. Economy – the 2002 Report*

In all the surveyed countries, the creative cluster is growing at a faster pace than the overall economy, with growth rates accelerating to as much as 3 – 5 times that of the overall economy in recent years. Even in Singapore where the creative cluster is at a comparatively nascent stage, the average annual growth rate from 1986 – 2000 is estimated to be 13.4%, as compared to 10.6% for the overall economy. This is not surprising when one considers that the same factors of human imagination, knowledge, innovation and enterprise that now drive the global economy, are best manifested within the creative cluster.

Table 2: Cross-Country Comparison of the Economic Value of Total Copyright Industries*.

Country	Year	% GDP	Average Annual Growth Rate: %AAG Copyright Industries / %AAG Overall Economy (Period of Tracking)	Value Added	Export	% National Employment
US	2001	7.75	6.9 / 3.2 (1977 – 2001)	US$707.5 bil	US$88.97 bil (for core copyright industries only)	5.9
UK**	1997-1998	5.0	16 / < 6.0 (1997 – 1998)	£112.5 bil (Revenue)	£10.3 bil	4.6
Australia	1999 - 2000	3.3	5.7 / 4.85 (1995 – 2000)	AU$19.2 bil (Industry gross product)	AU$1.2 bil	3.8
Singapore	2000	2.8	13.4 / 10.6 (1986 – 2000)	S$4.8 bil	S$4.0 bil	3.4

* In US, the total copyright industries comprise core copyright, partial copyright industries, distribution copyright industries and copyright-related industries. The Australia definition is similar but does not include the copyright-related industries. The Singapore statistics were extracted by the Department of Statistics based on the Australian framework of copyright industries. The full listing of industries is provided at **Annex 1.2**.

Sources:
- Copyright Industries in the U.S. Economy – the 2002 Report, Stephen E. Siwek, Economists Incorporated
- Creative Industries Mapping Document 2001, UK Creative Industries Task force, London
- The Economic Contribution of Australia Copyright Industries, Prepared by The Allen Consulting Group for Australian Copyright Council and Centre for Copyright Studies
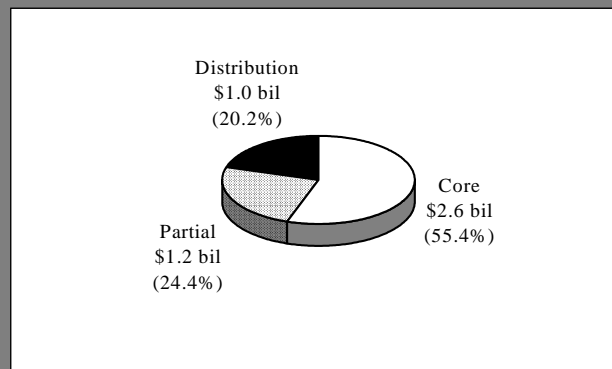- Singapore Department of Statistics

** The definition of UK creative industries is slightly different from the definition of total copyright industries adopted by US and Australia. The identified industries comprise advertising, architecture, the art and antiques market, crafts, design, designer fashion, film and video, interactive leisure software, music, the performing arts, publishing, software and computer services, television and radio.

Box 1: The Total Copyright Industries in Singapore Today

The Department of Statistics have conducted a study on the economic value of the total copyright industries in Singapore (based on the Australian methodology in *Annex 1.2*). The key findings are summarised below:

- In 2000, there were about 8,100 establishments in the copyright industries compared to 5,000 in 1990). This represented an average annual growth of 5.0 %;
- Total value-added generated by the copyright industries in Singapore amounted to $4.8 billion in 2000 (See *Chart 1*). Among the three groups, the core copyright industries (mainly data processing services, printing of newspapers and publishing of periodicals, books and magazines) accounted for the bulk (55%) of value added. The partial copyright industries (mainly advertising and architectural services) contributed another 24% while the remaining 20% accrued to the distribution copyright industries (mainly wholesale trade of photographic equipment, toys and sporting goods);

Chart 1: Composition of Singapore's Total Copyright Industries (2000)

Distribution
$1.0 bil
(20.2%)

Core
$2.6 bil
(55.4%)

Partial
$1.2 bil
(24.4%)

- The value-added of the total copyright industries expanded significantly from $0.8 billion in 1986 to $4.8 billion in 2000, representing an average annual growth of 13.4%. Their growth was faster than the economy's average annual increase of 10.6% over the same period. As a result, the economic importance of the copyright industries relative to the whole economy improved from 2.0% (as % share of GDP) in 1986 to 2.8% in 2000;
- Employment in the copyright industries grew at a faster rate than that of the overall economy. Total copyright employment rose from 30,700 in 1986 to 72,200 in 2000, an average annual increase of 6.3%. This exceeded the average annual growth of 3.8% in employment for the economy over the same period;

SWOT ANALYSIS

Strengths

- Cosmopolitan Population

Singapore's well-educated and cosmopolitan populace provides us with a sophisticated consumer base to serve as a test-bed for our creative products.

- <u>Supporting Factors</u>

Singapore's strong grounding in IT and telecommunications, our new focus on promoting innovation and entreprenuership, and our investment in the arts over the past decade make us well positioned to exploit new opportunities in the fusion of arts, business and technology

Weaknesses

- <u>Limited Domestic Market Size</u>

Singapore's limited market size requires our creative enterprises to adopt a global mindset.

- <u>Financing Options for Creative Industries</u>

Creative industries often have problems securing financing due to several reasons:
- Financial companies and venture capitalists may lack industry-specific knowledge
- Creative enterprises and individuals may lack business know-how
- High percentage of self-employed and small businesses
- Returns to Investment are sometimes intangible or long-term

- <u>Creative Climate</u>

Singapore needs to shake off its image of being an "over-regulated" city state, with a low tolerance for divergent views. Creative people and enterprises are attracted to, and flourish in places which are tolerant of creative discourse and provide space for experimentation.

- <u>Software vs Hardware</u>

The Singapore Government has pumped in more than $1 billion worth of investment over the past decade on arts infrastructure, including the $600 mil Esplanade, the new Asian Civilisation Museum II and other projects. To unleash the full potential of this infrastructure, there needs to be a parallel investment in software. We are currently lagging in this aspect vis-à-vis international creative hubs, even though the Renaissance City funding has alleviated the funding shortage slightly.

Opportunities

- <u>Tapping on Asia's Huge Market</u>

Singapore's multi-cultural heritage and multi-lingualism places us in a good position to tap into the growing markets in the region such as China, Malaysia and Indonesia. There is a potential audience of 2.8 billion people with a 7-hour flight radius.

- <u>New Asia Cultural Exports</u>

Building on STB's branding of Singapore as a 'New Asia' tourist destination where East meets West, there is an opportunity space for us to develop lifestyle or entertainment products that are uniquely Singaporean for the global market. We can draw inspiration from the J-pop and K-pop phenomena where cultural exports from Japan and Korea gained international popularity.

▪ Digital Media

Gartner, IDC and Forrester forecast that the digital media industry stands at more than US$100 billion last year and is likely to reach US$200 billion to US$350 billion in 3 years' time. This means that Singapore has the opportunity to capture US$5 billion to US$24 billion by being one of the top 3 to 5 digital media capitals for revenue flows.

Threats

▪ Intensifying International Competition

Global competition is intensifying, with many countries all over the world striving to harness the full economic value of their creative cluster.

▪ War for Creative Talent

Singapore has to compete vis-à-vis well-established creative hubs of the world, such as London, New York and San Francisco to attract and retain creative talent. Today, there are many anecdotal examples of "creative brain drain" where our local creative talent venture overseas to develop their careers.

VISION

Our vision is to develop a vibrant and sustainable creative cluster to propel the growth of Singapore's Creative Economy. This is in line with our new economic strategy to identify potential niches which are knowledge-based, innovation-focussed and has high growth potential.

Targets for 2012 include:
▪ **Double % GDP contribution** of the creative cluster from an estimated 3% in 2000 to 6% in 2012;
▪ Establish a reputation for Singapore as a **New Asia Creative Hub**:
  - Ranked among top 10 countries in Global Competitiveness Rankings for design-related categories
  - Recognised as a premier global media city
  - Seen as an innovative and multi-talented global city for arts and culture

Our success in developing a vibrant and self-sustaining creative cluster would depend on how well we develop and deploy our cultural assets. This would require a total value chain approach, beginning with the nurturing of a creative people who form the lifeblood of the creative cluster and also fuel the demand for creative products and services. This important issue will also be taken up by the ERC Subcommittee on Enhancing Human Capital, which will complement the work presented here.

This report is the culmination of 7 months' of intensive research and consultation with local and international practitioners, academics, industry and government agencies (**Annex 1.3 & 1.4**). Over the next few chapters, we will present specific strategies in the areas of (i) arts and culture, (ii) design and (iii) media, to exploit the new opportunities offered by the convergence of arts, business and technology.

INTRODUCTION

This chapter gives an overview of the economic performance of Singapore's arts and cultural sector, and the issues and challenges in developing this sector. It also discusses in broad strokes the future strategic direction to unleash the full potential of Singapore's arts and cultural assets. As defined in this report, the arts and cultural sector comprises performing arts, visual arts, literary arts, photography, crafts, libraries, museums, archives, galleries, auctions, impresarios, heritage sites, performing arts sites, festivals and arts supporting companies.

STATE OF THE ARTS

Economic Performance of the Arts and Cultural Industries

Singapore's arts and cultural scene has become more vibrant over the past decade. Some of the indicators are reflected below:

- The total number of performing arts activities and visual arts exhibitions increased by some 170% from about 1,700 in 1989 to about 4,600 in 2001.
- Ticketed attendance for performing arts increased by 67% from 562,000 in 1989 to 940,000 in 2001, translating to an average of 2,575 ticketed patrons a day.
- Visitorship to the National Museums increased 70% from 282,025 in FY 1989 to 480,000 in FY 2001.
- In 2001, two out of every three Singaporeans are library members, as compared to one out of every four Singaporeans in 1991.
- Visitorship to the libraries increased 5 times from 5.5 million in FY 1994 to 27.8 million in FY 2001.

The value-added of the arts and cultural activities in 2000 was estimated to be around $470 million in 2000 (or 0.29%

Historical Milestones

- The **1989 Report on Advisory Council on Culture and the Arts (ACCA)**, chaired by the late former President Mr Ong Teng Cheong then Deputy Prime Minister, is widely regarded as a watershed in the development of our arts and cultural scene. The Report paved the way for the formation of National Arts Council (NAC) and National Heritage Board (NHB). It also initiated the development of infrastructure such as the Singapore Arts Museum (SAM), the Asian Civilizations Museum (ACM) and The Esplanade – Theatres on the Bay.

- In December 1996 the **Committee on National Arts Education**, headed by Dr Soh Kay Cheng, proposed a coherent national arts education policy to develop the necessary creative competencies for Singapore in their report entitled "**The Next Wave of Creative Energy**".

- In April 1994, the Government endorsed the landmark **Library 2000 Report** that set the directions for transforming libraries into key pillars supporting learning. This led to the formation of the National Library Board to translate into reality the Library 2000 vision of expanding the learning capacity of the nation. This Report is now used as a reference guide by libraries worldwide.

- The report by the **Committee to Upgrade LASALLE-SIA and NAFA in July 1998** helped to legitimise arts manpower development at the tertiary level. Headed by Dr Tan Chin Nam, the Committee's report, "**Creative Singapore – A Renaissance Nation in the Knowledge Age**", recommended polytechnic level Government funding for LASALLE-SIA and Nanyang Academy of Fine Arts (NAFA). It also proposed the establishment of an Institute of the Arts (ITA) at the National University of Singapore (NUS), which will conduct degree courses in the performing arts. Singapore's first Conservatory of Music, offering degree programmes for music, will open in 2003.

- More recently, the Government endorsed the **Renaissance City Report in March 2000** by MITA. The Renaissance City Report had two main aims: to establish Singapore as a global arts city and to provide cultural ballast in our nation-building efforts. Six specific thrusts ranging from developing a strong arts and cultural base, recognising and grooming local talent to developing an arts and cultural "renaissance" economy were proposed. An additional $50 mil over 5 years in funding was allocated to MITA to implement the RCP blueprint.

of GDP), as compared to \$43 million (or 0.11% of GDP) in 1986 [Source: Department of Statistics]. This figure is deceptively small and does not give full justice to the wide-ranging economic impact of arts and cultural industries. First of all, arts and cultural activities command a high multiplier effect. Estimations from an updated 1995 input-output table compiled by NUS Centre for Business Research & Development, imply that every \$1 million of expenditures on arts & cultural activities would generate about:

- \$660,000 of additional output indirectly;
- \$270,000 of direct value added and \$380,000 of indirect value added; and
- 5 jobs directly and an additional 13 jobs indirectly.

This **multiplier of 1.66** is substantially higher than the banking industry's 1.4 and the petrochemical industry's 1.35.

Furthermore, it is important to recognise that the arts and cultural sector is **the artistic core of the creative cluster**, and is therefore part of the creative value chain, and closely linked to the overall economic performance of the cluster. Interacting closely with the design and media sectors, the arts and cultural sector provide the learning tools and experimentation space for creative individuals to hone their arts. For example, visual arts is a fundamental skill for designers while the humanities gives inspiration to screenwrights. The dynamism of the creative ecosystem is such that creative individuals can move with ease between the various industries, bringing about cross-pollination of ideas.

Finally, a vibrant arts and culture scene is vital to enhance **the attractiveness of Singapore to global talent and businesses**. A 2001 survey commissioned by EDB to study the quality of life for foreign talent based abroad and in Singapore showed that the Singapore arts and culture scene needs to be more vibrant in order to attract more talent here. A separate multi-country market assessment by Watson Wyatt in 2002 validated this, with foreign talents ranking the adequacy of cultural activities in Singapore as being the least satisfactory among lifestyle-related factors.

The Developmental Approach Thus Far

The National Arts Council (NAC), National Heritage Board (NHB), National Library Board (NLB) and Singapore Tourism Board (STB) are the key players involved in the development of the arts and cultural sector. Traditionally, STB has approached arts development from a business (tourism) angle, while the MITA agencies - NAC, NHB and NLB – have looked at arts from a non-profit angle (*Table 1*). This dichotomy of roles is becoming increasingly obsolete and does not reflect well the complex interdependence of commercial and non-profit arts. While non-profit arts and cultural activities constitute a public good, there is no doubt that they interact very closely with their commercial counterparts. The interplay between non-profit and commercial arts is dramatically revealed in the relationship between non-profit theatres and Broadway's commercial theatre in the US[1]. Because the economics of Broadway work against the development of plays, the task of producing much new work falls to the nation's non-profit theatres. Over the past twenty years, 44% of the new Broadway plays originated in the non-profit sector. **Henceforth, MITA**

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[1] Creative America: A Report to the President by the President's Committee on the Arts and Humanities, 1997

agencies and STB will work together to unleash the economic potential of the arts and cultural sector.

Table 1: Traditional Roles of Key Agencies in Developing the Arts and Cultural Sector.

NAC, NHB, NLB *"Arts for Arts' Sake"*	STB *"Arts for Business' Sake"*
• Artistes and audience development • Outreach programmes • Art education • Financial assistance for non-profit arts • Arts infrastructure	• Investment promotion to attract top international arts investors • Industry development of local arts businesses • Tax & financial incentives for commercial as well as non-profit but viable arts groups • Arts tourism programme to cultivate travel trade & global media • International marketing of Singapore as an arts destination ("global arts city") and regional arts hub both for events ("eventful city") and for business

SWOT ANALYSIS

Strengths

▪ <u>Cosmopolitan and Relatively Sophisticated Local Market</u>

With younger Singaporeans becoming increasingly well-educated, they fuel the growing demand for a more vibrant and innovative arts, cultural and entertainment scene. Three quarters of the Singapore Arts Festival audience are less than 40 years old. Singapore now has a critical mass of some 250,000 theatregoers.

▪ <u>Investment in Arts Infrastructure</u>

From 1989 to present date, the Singapore Government has invested more than $ 1 billion in building arts and cultural infrastructure. New projects include the soon-to-be-opened $600 million Esplanade, the new Asian Civilisations Museum II at Empress Place, Singapore Tyler Print Institute, the redevelopment of Singapore History Museum, the Old Parliament House and Drama Centre, among others. In addition, sports infrastructure, such as the National Indoor Stadium, have also been used as integrated venues for arts, cultural and entertainment activities.

Singapore's Arts and Cultural Infrastructure
- What's New? What's Next?

- **Esplanade, Singapore's premier performing art centre, will open in Oct 2002**
- World War II Interpretative Centre, Reflections @ Bukit Chandu was officially launched on 15 Feb 2002
- Singapore Tyler Print Institute was launched on 10 Apr 2002.
- Asian Civilisation Museum @ Empress Place was officially opened in Feb 2003
- The Singapore History Museum will be re-developed (2003 – 2005)
- Niche libraries, library@esplanade and Sengkang Community Library are opening in 2002.
- **New National Library @ Singapore will open in 2004**
- The Jurong East Regional Library will be re-developed to adopt the fusion concept (art-business-technology)
- Arts belts @ Little India, Chinatown and Waterloo Street were created to provide arts housing space
- **Old Parliament House's conversion into a multi-disciplinary arts centre will make the Empress Place area Singapore's premier Arts and Cultural belt**
- Drama Centre will be redeveloped.

Weaknesses

- Lagging Investments in Software

To unleash the full potential of our arts infrastructure, there needs to be a parallel investment in software, such as in developing our creative talents and audiences. We are currently lagging in this aspect vis-à-vis international creative hubs (**Table 2**), even though the Renaissance City Project funding has alleviated the funding shortage to a certain extent. Software development should be continued, and further enhanced, to develop our cultural capital further before we can talk about any meaningful deployment to create new value for Singapore.

Table 2: Comparison of Government Funding for the Arts (*Source: MITA)

Item	Singapore 2001/2002* (1998/1999)	London 1997/1998 (1=S$2.43)	New York City 1998 (US$1=S$1.69)	Victoria, Australia 2001/2002 (A$1 = S$0.97)	Hong Kong (HK1 = S$ 0.2)
Per Capita funding Incl. Capital expenditure	S$34.53 (S$26.42)	S$143.04	S$44.38	S$41.60	n.a
Excl.Capital expenditure	S$14.75 (S$7.27)	S$108.72	S$32.85	S$19.91	S$49.67

* 2001/2002 figures include injection of funding from Renaissance City budget.

- Small Domestic Market

Local audience development is an essential market creator. However there is no strong culture of arts appreciation among the general population, especially among the heartlanders. There is a need to enhance our arts education and outreach programmes so as to strengthen our local market demand. At the same time, our local enterprises have to explore ways to deepen their local market reach and to internationalise their offerings.

- High Business Costs

While some arts companies are profitable, one key issue faced by potential investors is the high costs of operating an arts business in Singapore. In particular, the high commercial rental rates (both long term leasing of gallery/office space, and short term hire of arts facilities e.g. theatres, exhibition halls) is one major hurdle. To help companies defray these high costs, incentives need to be provided to make Singapore a more viable business location.

- Low Private Sector Partnership and Sponsorship

An important deciding factor for the staging of worldclass arts and cultural events in Singapore is the availability of private sector partners and sponsors. It is necessary to intensify efforts in our cultivation of the private sector as investor, patron and donor. In the US for example, direct federal funding of arts and entertainment is limited, but various tax breaks and incentives are offered to encourage contributions and sponsorships by corporations, private foundations and individuals. This

leverages on a strong national tradition of corporate and individual philanthropy. While there are already existing NAC, NHB and NLB-administered tax exemption schemes, there is a need to further increase the range of tax incentives on offer to encourage greater participation by the private sector, and to develop a strong tradition of cultural philanthropy in Singapore.

Opportunities

- Cultural Tourism

According to the World Tourism Organisation, cultural tourism accounts for 37% of global tourism and is forecasted to grow at a rate of 15% per year[2]. In Singapore, the value-added of arts tourism increased from $2.19 million in 1986 to $38.4 million in 1999, registering an average annual growth rate of 24.6%.
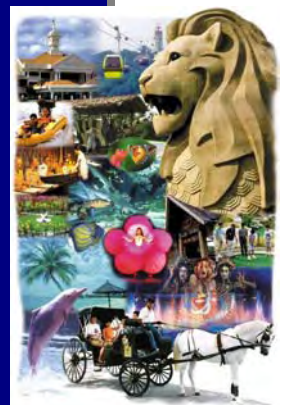
- Fusion Entertainment

The fusion of arts, business and technology can be applied to create unique experiences (events, parks, etc) for consumers (see box on "Remaking Sentosa").

- Singapore Content and Brand

The fusion of arts into business and technology can also be applied to create a more distinctive Singapore identity and branding for our products, content and services.

> **Remaking Sentosa**
> *- Developing An Experiential Fusion Park*
>
> The Sentosa Development Corporation (SDC) is in preliminary discussions with multi-agencies to develop a hi-tech, hi-touch experiential park as a key attraction on the remade Sentosa. Tearing away from the convention of developing theme parks with rollercoasters and theme rides, SDC will endeavour to fuse arts, business and technology into a potent brew of differentiated experiences for all visitors. Some of the ideas being considered for the park include a digital media urban entertainment centre and an integrated Science Centre and Children's Museum with an eco-forest. SDC envisages the most advanced technology and richest cultural content woven seamlessly into Sentosa's nature setting, without compromising the tranquillity and unique character of the island.

- Proximity to Huge Asian Market and Cultural Resources

There is a potential regional audience of 630 million within a 3-hour flight time, and 2.8 billion within a 7-hr flight time. This, coupled with our proximity to a vast wealth of arts and cultural resources in the region, means that we are well-placed to offer a total experience of Asian arts and culture to people from the region and beyond.

Threats

- Increasing Regional Competition

Many countries in Asia are seeking actively to develop their own arts and cultural industries through investments in infrastructure and lowering business costs for arts and cultural enterprises. Some of the more aggressive competitors are:
- Malaysia which offers attractive incentives, high level Cabinet support and good response from audiences;
- Hong Kong which is blessed with a huge hinterland, where it can tap on the mainland Chinese audience and talent base;

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[2] Source: Robert Palmer, President and CEO, Palmer-Rae Associates, International Cultural Consultants
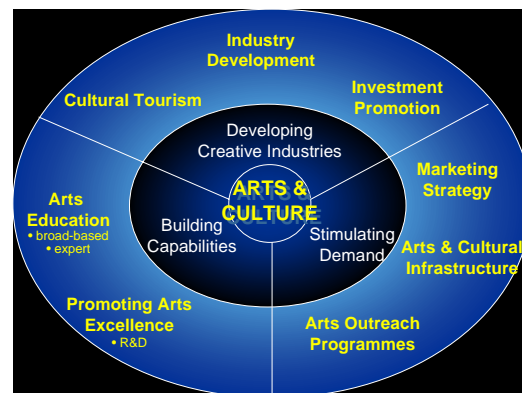
- Shanghai which has a large talent and audience base and has invested in artistic support and new venues such as the Shanghai Grand Theatre and Oriental Art Centre.

RENAISSANCE CITY 2.0

Singapore has indeed achieved a lot in the past decade of arts development. Looking forward, our new strategic direction is to develop and deploy our arts and cultural sector, with the objective of unlocking the full potential of our existing arts infrastructure and the overall Creative Cluster. We will seek to integrate arts and cultural development more deeply and pervasively into the economic landscape of Singapore, and to fully harness its multi-faceted influence on our national competitiveness. This will help us achieve **our vision of Singapore as a Renaissance City – a highly innovative and multi-talented global city for arts and culture.**

A fundamental focus in the coming years would be to ensure that we **maximise the potential of the existing and new arts infrastructure by developing our software and enhancing the level of integration with the business and people sectors**. At the same time, **MITA agencies must shift away from the "arts for arts' sake" mindset, to look at the development of arts from a holistic perspective, to contribute towards the development of the creative industries as well as our nation's social development.**

Building on the original Renaissance City Report, three strategies have been identified to propel the arts and cultural sector forward. The list of recommendations described below is by no means exhaustive, but highlights some of the key initiatives currently being explored.

Strategy 1: Build CREATIVE CAPABILITIES

Recommendation 1.1: Embed Arts, Design and Media within All Levels of Education

While it has often been argued that the arts must be considered an integral part of the school's core curriculum, it is often difficult to justify more curriculum time for arts vis-à-vis other core subjects such as Languages, Science and Maths. It is therefore recommended that the arts, design and media be embedded as learning tools for all levels of education. For example, drama and literature could be employed to help students enhance their language abilities while multi-media could be used as a means to demonstrate creativity in science and maths projects. Today, at least 40 MBA programmes throughout the US feature design within their curriculum and a whole generation of US students has come out of the system with a solid grounding in design. To this end, Singapore would also need passionate teachers who are skilful in weaving in arts, design and media into the education curriculum to help their students learn and think more broadly and creatively.

Recommendation 1.2: Establish a Flagship Art, Design and Media University Programme[3]

Currently, three of the Polytechnics (NP, NYP, TP) and Specialised Art Schools (LASALLE-SIA and NAFA) provide diploma level education in the various design disciplines, as well as degree programmes with foreign universities. However, the local universities (NUS, NTU and SMU) offer limited options in terms of degree courses in visual arts, design and media[4].

It is recommended that a flagship art, design and media university programme be developed at the proposed NUS-X campus, to complement the current design-related programmes at the NUS School of Environment and Design and the Design Technology Institute (School of Engineering). It is further proposed that the new School leverage on international expertise by collaborating with leading institutions such as Royal College of Art (London), University of Art and Design (Helsinki), and Pasedena Art Centre (Los Angeles). This new School of Art, Design and Media could differentiate itself by offering a broad-based, research-oriented curriculum, which straddles topics from visual arts, humanities, technology, communications to business. The school will produce multi-disciplinary creative experts who are well-equipped to propel the growth of the creative industries.

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[3] This proposal could complement the 1998 Report of the Committee to Upgrade LASALLE and NAFA, which recommended that the two schools be allowed to award NUS degrees in the visual arts at the end of 5 years if they meet the necessary standards as agreed by the Arts Education Council.

[4] Some design modules are present in the engineering courses offered at NTU and NUS, including the Design Technology Institute (with the Eindhoven Institute of Technology) in the NUS Faculty of Engineering. There is also the School of Design and Environment in NUS, which offers the only degrees in Architecture (BAArch hons and MArch), and Industrial Design (BAID hons) in Singapore. The first batch of students in Industrial Design will graduate in June 2003.

Strategy 2: Stimulate SOPHISTICATED DEMAND

<u>Recommendation 2.1</u>: Establish a "Percent-for-the-Arts" Scheme to Promote Public Art

Through the inclusion of artworks in public spaces and the incorporation of tasteful design and landscaping in the neighbourhood, we can widen people's exposure to, and appreciation of arts and its relevance in everyday life. It is recommended that Singapore establish a "Percent-for-the-Arts" scheme to promote the development of public art in Singapore. The Percent-for-the-Arts Scheme has been implemented, with much success, by many countries and cities.

Singapore's Percent-for-the-Arts Scheme can be as follows:

Funding Sector	Scheme	Proposed Percentage
Government	Mandatory	1% of Development Budget
Private	Voluntary (with tax exemption)	1% of Development Budget

The fund could be used to commission or procure artworks (sculptures, paintings, murals, art installations, etc.) in common areas accessible 24 hours a day to the public, to maintain public artworks[5] and for other public art projects. **One-North** will prototype this scheme, which should eventually be made mandatory for all public sector agencies. The 1% rule can be used as a guide for private sector expenditure on the art, rather than a hard-and-fast rule. Tax exemption or even double tax deduction could be offered to companies as an incentive to invest in public art.

<u>Recommendation 2.2</u>: Develop Fusion Space for the People

There is tremendous potential in creating fusion spaces that offer richer and more holistic experiences for users.   Fusion can take place across several dimensions. For example, we could fuse our memory institutions (libraries, museums and archives) into a blended learning experience. We could also look at the integration of arts, business and technology as a source of inspiration for our library design, collections and services. Some of the new initiatives could include:

- A Southeast Asian Arts, Heritage and Cultural Library
  - This library will serve as a resource centre for Southeast Asian arts, heritage and culture, and promote Singapore as a regional centre for the arts. Apart from hosting collections from around Singapore and around the region, the library can be used as a venue to exhibit and showcase arts collections.
- Satellite Arts Libraries
  - These will complement the Southeast Asian Arts, Heritage and Cultural Library in promoting greater awareness and interest in the arts. Their focus will be on "local" content and culture
- Ethnic Language Libraries
  - These libraries will provide resources and promote activities for the various ethnic communities to better understand their own communities and those of their ethnic

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[5] 30-40% of the Percent-for-the-Arts funding should be set aside for conservation. For instance, this is set at 40% in Los Angeles.

brothers. They have the potential to serve as centres of research and a visiting site for tourists.
- Jurong and Tampines Regional Libraries
  - These libraries will be developed as fusion spaces adopting a cross-disciplinary approach. Jurong Regional Library will seamlessly integrate arts, business and technology into every aspect of the library's design, collection and services. It is envisaged that it will become a focal point for artists to mingle and interact with entrepreneurs and research scientists. It will also be a testbed for incubating creative ideas and innovations.
  - Tampines Regional Library will promote social cohesion by infusing elements of culture and heritage into its library collections. Travelling thematic exhibitions from the Singapore History Museum, clans, associations and the archives can be brought into this fusion space, and visitors will be able to experience Singapore's rich cultural heritage and historical transformation through a myriad of activities woven tightly into both museum and library collections.

In addition to fusion libraries, niche libraries could also be established to provide in-depth information to help target economic sectors such as Life Sciences, Medicine, Law, Design and Media.

Recommendation 2.3: Work with CDCs to Develop "Creative Towns" [6]

It is recommended that a 'Creative Town' initiative be piloted with a selected township to serve as a developmental model for a vibrant, creative, culturally rich, entrepreneurial and technologically savvy community. This prototype can be fine-tuned and, eventually, adopted by the rest of the CDCs to evolve a Creative and Connected Singapore. The success of the Creative Town initiative would require the synergistic collaboration of the Public, Private and People Sectors.

The Creative Town concept should be aligned along the following objectives:
- Unleash the latent creativity and passion in each individual, and in doing so, enable our people to fulfil their diverse aspirations;
- Integrate arts, culture, design, business and technology into community planning and revitalisation efforts;
- Enhance the ideas-generating capacity and entrepreneurship qualities of the community through targeted training programmes, physical and virtual infrastructure, and mentoring schemes;
- Increase cultural awareness through programmes and infrastructure such as the "Percent-for-Art" Scheme, fusion spaces, satellite museums, niche libraries, research and documentation projects, etc; and
- Promote community bonding, local pride and participation through arts and cultural events and festivals, and the employment of the newest infocomm and media technologies.

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[6] Afternote: The Mayors' Committee Meeting endorsed the Creative Town proposal on 19 August 2002. A multi-agency taskforce involving private, public and people sectors is being set up to prototype the Creative Town concept at a selected township.

<u>Recommendation 2.4:</u> Develop a Virtual Cultural Resource Network

Facilitated by new infocomm media technologies, a new museum space has evolved – the virtual museum. Many overseas museums, including the Smithsonian Institute have ventured into this new area, offering visitors a virtual tour of museum exhibits. It is recommended that Singapore set up a Virtual Museum network that allows visitors to navigate through curated exhibitions. Scotland and Australia have also set up national databases on their cultural resources which can be easily accessed by users from home. It is recommended that Singapore set up a similar national cultural resources on-line network to capture all the cultural resources available in Singapore. A resource database on traditional Asian cultures can also be set up, since this is an area where Singapore has built up sufficient knowledge and expertise. Besides capturing physical collections in digital form, the digital media has also created a new form of art – cyberart. While it can be hosted in physical museums, putting it on the web ensures that interactions with the cyberart are more true to its form. Cyber interactions with visitors can also be tracked and researched, adding a new dimension to the development of virtual museums in Singapore.

<u>Recommendation 2.5:</u> Transform Singapore Art Series into Singapore Biennale to Enhance Singapore's International Profile

The Singapore Art series, the latest installment being the Nokia Singapore Art 2001, has its roots in the National Day Art Exhibition in 1968. Since 1999, NAC has been working closely with SAM to introduce newer and innovative ways of presenting Singapore art both locally and abroad. These changes are necessary to facilitate the showcasing of our artists abroad and Singapore's eventual entry into the international circle of renowned art events.

It is recommended that the Singapore Art Series be transformed into Singapore Biennale to become the most important national visual arts event showcasing top local and international artists. It should aim to be on par with other Biennales such as Shanghai Biennale and Kwangju Biennale, within the larger network of international biennales and triennales. Aside from emphasising excellence, innovation and originality, this proposed biennale should be an international event framed in an Asian and Southeast Asian context. To increase awareness and capture audience interest, this biennale should be audience-oriented and delivered to the public via additional creative modes such as the broadcast, print media and the Internet. To nurture the development and encourage creative experimentation among our young and promising artists, keeping in mind their long-term artistic development, a modest yet significant U19 (under-19) section can be created as a fringe event.

<u>Recommendation 2.6:</u> Develop a New Museum of Modern and Contemporary Art

In the longer term, it is recommended that Singapore develop a Museum of Modern and Contemporary Art (MoMCA). This would complement the existing Singapore Arts Museum (SAM) and the proposed SAM Annex (or Queen Street Gallery[QSG])

to strengthen Singapore's standing as a global city for arts and culture. MoMCA has the potential to replicate the phenomenal successes of Tate Modern and Guggenheim Bilbao in generating economic spinoffs and tourism dollars. While SAM and QSG specialise in national and Southeast Asian art, MoMCA will focus on showcasing international contemporary and modern artworks and design. MoMCA is also envisaged to become a new architectural icon that all Singaporeans identify with and be proud of. An international architectural concept competition could be held to select the best design. A site at the Marine Promontory has already been reserved for MoCMA. It is proposed that an international committee of museum advisers be appointed to guide the development and operation of this new museum.

Strategy 3: Develop CREATIVE INDUSTRIES

<u>Recommendation 3.1</u>: **Arts and Cultural Entrepreneurship**

Adopting a 'creative industries' perspective would entail fundamental changes in the way NAC, NHB and NLB operate, requiring them to adopt a holistic approach to develop the arts and cultural sector. Apart from developing the non-profit arts and cultural scene, these agencies can also help to promote arts and cultural entrepreneurship and identify new opportunities to enhance the arts and cultural industries' value-added to the economy.

Some of the new areas of focus for MITA agencies could be as follows:

- **Cultural Tourism**
  - It is recommended that MITA agencies collaborate with STB and travel agencies to develop cultural tours for Singaporeans and international audiences, both within Singapore and in the Southeast Asian region. This will be a win-win approach for STB and MITA agencies to grow the tourism industry and attract more cultural visitors.

<u>NAC</u>
- **Arts and Design Industries**
  - It is recommended that NAC facilitate the growth and internationalisation of arts and cultural industries such as recording music, publishing, and arts supporting industries etc. It could also encourage and facilitate business volunteerism through matchmaking the business expertise of individuals and corporations with arts groups. This will help to raise the professionalism of arts companies by upgrading their business administrative and marketing skills.
  - Given the close link between visual arts (currently under NAC's purview) and design, it is also proposed that NAC take on a key role to boost the design industry in Singapore by helping to raise design standards and public awareness.

<u>**NHB**</u>
- **Merchandising**
  - Another proposal is for NLB to tap on Singapore's wealth of heritage resources and to grant access and rights for commercial firms to use them for merchandising purposes. These merchandise could be developed as unique brands for Singapore, becoming another means of expressing the Singapore identity. The resources in NHB could also be packaged into useful reference materials for designers looking for inspiration and past trends.
- **Arts and Heritage Consultancy Services**
  - It is also recommended that NHB tap on its expertise to offer art and heritage consultancy services to businesses and organisations in Singapore and the region. The services offered could range from building up a corporate art collection, conservation, providing loans of art works, research services, archival services, advice on exhibition design and layout, etc.

<u>**NLB**</u>
- **Global Knowledge Concierge Service**
  - The recommendation is to develop Singapore into a first stop Asian Information Service, with NLB playing a key role in facilitating knowledge creation and arbitraging. It is proposed that **a Global Asian Business Research and Information Centre** be established to serve as a regional gateway to the world with a strong research team providing information analysis, syntheses and packaging service to ensure contextual relevance. It will also support the needs of Singapore's research, business and government communities. To facilitate tapping regional resources and translating that to national assets with marketable value, an **Asian e-Reference and Information Service** could be set in place to connect NLB with partner libraries.
- **Information as Business**
  - Studies have shown a growth in online information services worldwide, with governments and industry investing in digital content creation especially in US, UK, Europe and Australia. It is therefore recommended that NLB look into how to **grow the Information Business** into a sizeable source of revenue. An **Information Ecosystem** must first be developed, so that a Cluster Framework can be defined to groom and develop local companies through partnership programmes and attract leaders to hub out of Singapore to conduct research and publishing in the region. It is also proposed that an **Asian Information Marketplace** be developed to showcase NLB's capabilities and priced products and Services.
- **Library Consultancy Services**
  - A new opportunity also lies in Library Consultancy Services as Singapore is now seen as a leader in public library services. To attract new business, it is recommended that NLB set up a **Libraries @ SINGAPORE Showcase** and play an active role in library development elsewhere.

CHAPTER THREE:
THE "DESIGN SINGAPORE" INITIATIVE

INTRODUCTION

This chapter explains the role and importance of design as part of the Creative Economy to enhance Singapore's continued competitiveness. It sets out the vision and desired outcomes of the "Design Singapore" Initiative, as well as the strategic thrusts and draft recommendations of the taskforce.

DESIGN – THE NEW COMPETITIVE EDGE

Why Design Today?

With growing access to better technology, industries are increasingly competing at equal price and functionality. The new competitive advantage lies in the ability to carve out new markets and create new markets through the fusion of business, technology and arts. Design, which functions to bring about such convergence, has emerged as the key differentiation strategy for businesses[1].

> "At Sony, we assume all products of our competitors will have basically the same technology, price, performance, and features. Design is the only thing that differentiates one product from another in the marketplace."
>
> *Norio Ohga, Chairman and CEO, Sony*

> Design is the creative harmonic between culture and industry, technology and consumers, and engineering and art.
>
> *Dick Powell, Director, Seymour Powell*

The change in world demographics, such as greying populations, and trends brought about by new convergent technologies and the needs for sustainable development have also issued new challenges. These demand greater design sensitivities and solutions, from the tools and appliances we use to the spaces we live in.

What is Design?

Design can be understood as material and conceptual innovation, realised through the integration of arts, culture, business and technology, and experienced as beauty, value and meaning. It is therefore a misconception that design is just about look and feel and image makeover. Design embraces not only aesthetics but also market research, usability, safety,

Design Forms & Industries

2D Planes: Graphics, Illustration, Advertising, Signage, Multimedia, Communications
3D Objects: Fashion, Crafts, Jewelry, Ceramics, Equipment, Devices, Appliances, Machinery
3D Space: Architecture, Interiors, Lighting, Landscape
4D Movement: Transport & mobility, Distribution Systems, people movers, virtual simulations
xD Futures: Convergent Technologies, New Paradigms, New Media

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[1] Samsung's use of bold designs to transform itself has resulted in its world market capitalisation of US$48 billion in 2001. It was also singled out as the fastest growing brand in *BusinessWeek*'s latest survey with *Interbrand*. Samsung is ranked 34th in brand value globally in the survey on the world's most valuable brands, having gained as much as 30% increase in its brand value over the past year. (*Business Week,* August 5 2002) Research on UK companies has revealed that for every extra 1% turnover spent on design and product development, a company's profit and turnover will be increased by 3-4% over five years ("Contribution of Design to the UK Economy", Andrew Summers: London Business School, June 1997). When Fitch, an international design consultancy, tracked the share prices of its publicly-listed and quoted clients over a five year period, it found that the funds grew by 350% as compared to the market average of 90%. ("Competitive Advantage Through Design", Design Council UK 2001)

ergonomics, environmental sustainability, new technologies, logistics and consumer experience. In today's "weightless economy", design as manufactured product has evolved into design as intellectual property and cultural capital, embedded along the entire economic value chain.

What is the National Significance of Design?

For these reasons, design is critical not only to businesses, but is also high on the national agenda for many countries. Governments around the world have recognised the importance of design to national competitiveness in the following ways:

    (a) Driving the innovation process and hence industry competitiveness;

    (b) Contributing to the level of creativity, cultural buzz and attractiveness of a place for global talent; and

    (c) Strengthening the marketing and unique "branding" of a country, including its products and services, to the world.

Countries such as Finland, Ireland, Spain, Denmark, UK and South Korea have therefore developed national design policies and championed design excellence as a key driver of national competitiveness. The accordance of such national significance to design is also because the promotion of design, as a result of design's multi-disciplinary and integrative function, cuts across many areas of national concern and planning, such as urban development, enterprise and trade development, education and capability development, culture, heritage and tourism.

DESIGN 2005! (FINLAND)

The Design 2005! programme sets the objectives for the public sector in the development of Finland's "design system", which is to enhance competitiveness through the development of education, training and research in the design field and the integration of design into the development of the national innovation system. It also seeks to develop a national design culture of international renown to strengthen the national identity and cultural image of Finland. Design policies are jointly crafted by the Finnish Ministry for Trade & Industry, the National Fund for Research & Development, the Ministry of Education, the Ministry of Foreign Affairs and the Ministry of Culture.

DESIGN IRELAND

Enterprise Ireland, a national economic development organisation, launched Design Ireland to "brand" Irish design and promote the value of design in all aspects of the Irish economy. It has embarked on trade missions to pursue new international partnerships in design.

THE GLASGOW COLLECTION (SCOTLAND)

The Glasgow Collection was created as part of the city's efforts to promote Glasgow as a centre of design. Each year, the Glasgow Collection will fund the design of at least 15 exciting and innovative new products, with the aim of taking a number of prototypes to production and working with local manufacturers to create products that help local businesses become more competitive.

HONG KONG DESIGN CENTRE

To further promote and galvanise the design industry in Hong Kong, the Hong Kong Government, in particular the Technology and Innovation Commission, supported the setting up of the Hong Kong Design Centre in the Heritage Building as the home to the new Hong Kong Federation of Designers.

SOUTH KOREA'S DESIGN POLICY

The First Five-Year-Plan for Industrial Design promotion (1993-1997) resulted in a rapid expansion in the number of design firms in Korea.

However, the challenge arising from the Financial Crisis was for fundamental innovation in Korea's design strategy, to promote design quality and not quantity.

The Second Five-Year-Plan was therefore launched to inspire design creativity and improve the quality of Korean design, including efforts to
- Raise public awareness
- Establish infrastructure such as the Korean Design Centre
- Enhance Design Education, including professional training
- Encourage industries to employ innovative designs, esp. SMEs
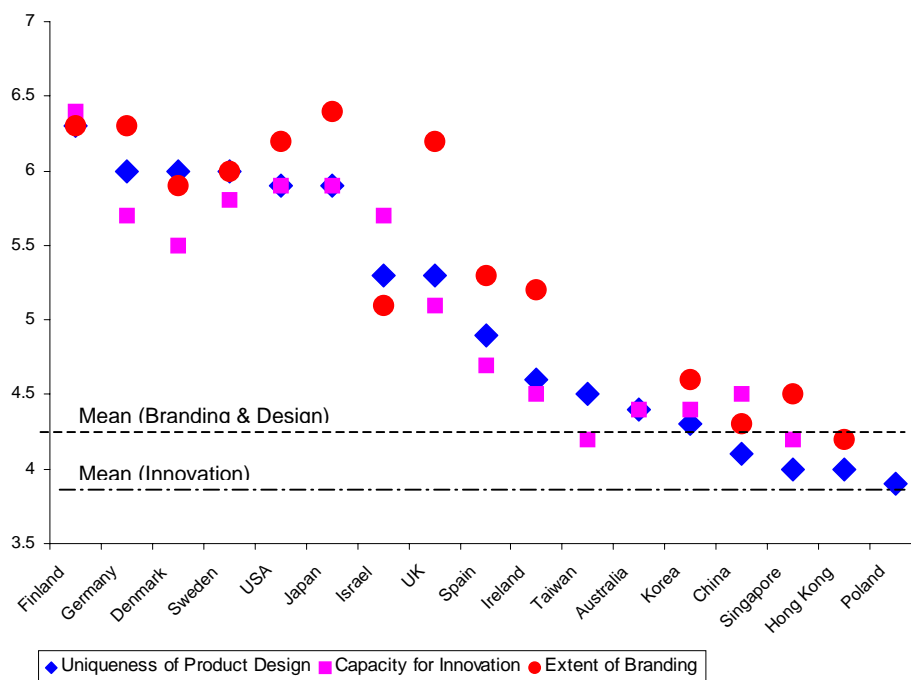- Host international events and promote the Korean brand

By elevating design to the top of its national agenda, South Korea has experienced an economic and cultural revival in recent years. Korea's design initiative is a deeply integrated one – it is fused with Korea's hosting of the 2002 World Cup, the transformation of brands such as Samsung and the phenomenal growth of Korea's cultural industries.

Design & Singapore's Competitiveness

According to the Global Competitiveness Report 2001-02, Singapore is only slightly above the mean for "Extent of Branding" and "Capacity for Innovation", and below the mean for "Uniqueness of Product Design." We are ranked 23rd, 26th and 34th respectively. As compared to other categories in the Report, these design-related categories indicate an area of our competitive disadvantage and weakness. Our closest competitors are the economies of Korea, Hong Kong, Taiwan, China and Ireland. The chart below provides the ranking and scores of selected countries (details are at **Annex 3.2**).

Chart 1: WEF Competitiveness Report 2001-02

Design Industry

In a 2001 study on the economic impact of product and visual communication design activities in Singapore (1999-2000)[2], the output of the design cluster in Singapore amounted to $3.9 billion in direct contribution to GDP, an additional $3 billion in indirect contribution, and $2.7 billion in value added which is a total 1.9% of GDP. The cluster, comprising more than 3500 establishments (see **Table 1a**), directly employed some 25,000 individuals. Significantly, the economic spin-offs from design were much higher than that for other industries (see **Table 1b**). Design is therefore one of the best ways to enhance and create new value in any industry.

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[2] The Study was commissioned by IE Singapore and conducted by the NUS CBRD (Centre for Business Research and Development). The Design cluster surveyed included software and multi-media, advertising, art and graphic design services, and industrial design activities.

Table 1a[3]

Design Industry	Establishments
Architectural Services	382
Advertising Services	686
Industrial Design Services	83
Interior Design Activities	1665
Art & Graphic Design Services	1089
Fashion Designing Services	53
IT & Web Design & Consultancy Services	699
Total	**3657**

Table 1b

Industry	Output Multiplier
Product & Visual Design	**1.76**
Arts & Culture	1.66
Computers	1.47
Exhibition	1.44
Banking Services	1.4
Petrochemical Refining	1.35

Government's Role in Developing Design

The Economic Development Board (EDB) and International Enterprise Singapore (IE Singapore) have been the government agencies looking after the design industry and the design capabilities of companies in Singapore. EDB oversees the development of industrial design companies in Singapore, including the attraction of international design companies to locate in Singapore, while IE Singapore is currently promoting and developing design as a strategic business capability for Singapore-based companies for internationalisation. IE Singapore's efforts encompass the development of new products and product adaptation capabilities for international markets as well as branding[4]. Together with its strategic partners, IE Singapore also organises the Singapore Design Awards, the Young Designers Award, and the International Design Forum.

Design Education

Design is taught as part of the "Design & Technology" course — a compulsory subject at lower Secondary and optional at upper Secondary levels. The 4 Polytechnics and Specialised Art Schools (LASALLE-SIA College of the Arts and Nanyang Academy of Fine Arts [NAFA]) provide diploma level education in the various design disciplines. Some 1500 and 800 students are registered for design-related diploma courses at the Polytechnics and Art Schools in 2001 respectively[5].

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[3] Source: Registry of Companies; and Department of Statistics 2001

[4] Between 1991 and 1995, the Design Centre was managed by the then TDB. Besides organising trade missions to promote Singapore design and organising the International Design Forum, the Centre also served as an exhibition space for international and local designs. IE Singapore's current design and brand capability developmental thrusts include the following:

(a) Cultivation of design and brand talents and related institutions

(b) Enhance companies design and brand capabilities via strategic consultancy, benchmarking and research initiatives

(c) Develop awareness through forums and customised programmes

(d) Create international networking and profiling opportunities

(e) Identify, profile and assist good Singapore designs and brands willing and able to go global

[5] Besides courses in product, fashion, environment and graphic design, other design-related courses include film and media studies in the Polytechnics, and visual arts at the Art Schools.

LASALLE-SIA and NAFA also collaborate with foreign universities to offer design-related degree courses.

Design modules are offered in the engineering courses offered at Nanyang Technological University (NTU) and National University of Singapore (NUS), including a Masters in Design Technology at the Design Technology Institute (with the Eindhoven Institute of Technology) in the NUS Faculty of Engineering. There is also the School of Design and Environment in NUS, which offers the only degrees in Architecture (BAArch hons and MArch) and Industrial Design (BAID hons) in Singapore. The first batch of 24 graduates in Industrial Design will graduate in June 2003.

STRENGTHS AND OPPORTUNITIES

Singapore's relatively small but sophisticated market and consumer base, our existing strengths in infocomm integration and other technology-intensive industries, as well as our unique position as a English-speaking gateway to Asia underlie the opportunities for design in Singapore.

▪ **A Leading Design and Experience Island:**
From urban planning to the design of public services such as our libraries and hospitals, and attractions such as the Night Safari, successful design marrying efficiency with beauty, technology with consumer sensitivity, has been employed to enhance total user experience and human potential.

▪ **A Global Design & Innovation Testbed for Pilots and Trials:**
This would include market research and the re-design of global products and services, leveraging on our multicultural population, and access to the Asian market; and the 'hothousing' of new design ideas, leveraging on our technological expertise and industrial and research infrastructure. Such a positioning would, in the long term, contribute to building our design expertise and reputation as a design hub in Asia

▪ **"New Asia" branding as a Unique and Exportable Style:**
The New Asia branding would leverage on Singapore's unique position as both a gateway to the various cultures of Asia and a contemporary cosmopolitan city, as the basis for design identity and values. This is particularly in the areas of lifestyle products and services, such as food and beverage, hospitality, entertainment and retail services sectors.

"The Philips Innovation Campus (in Singapore) will serve as a hotbed for creativity and technological progress ..... Philips and Singapore are in perfect innovation tandem and the campus will ultimately provide a platform for innovative minds to meet, against an intelligent ambience."

Cor Boonstra, former President and CEO, Royal Philips Electronics

"In Banyan Tree in particular, we consider design — not only architectural but in every aspect of the guest experience — to be a very important factor in our competitive edge and it provides much of the value added in the business proposition."

Ho Kwon Ping, Chairman & CEO, Wah Chang Group

"NLB did put a lot of effort into design of our physical libraries...when we first renovated the National Library at Stamford Road. From its beginnings there and for every library thereafter, we prototyped and experimented with lifestyle concepts and ensured that we tried our best to optimise convenience, accessibility, affordability and usefulness. The designs of each library tried to reflect these concepts as much as possible."

Christopher Chia, CEO, National Library Board

GAPS & CHALLENGES

Challenge 1: From Basic Bottomline to *Design Excellence & Innovation*
In focusing on short-term bottomline gains, companies often fail to consider design strategies and to leverage design excellence as a means of producing unique and globally competitive products and services. There is also the misconception that design is only about aesthetics or packaging. The challenge is therefore to bring about a fundamental change towards valuing design excellence as a sustainable and strategic advantage for organisations.

Challenge 2: From Importing Design to *Nurturing Local Design Capabilities*
In the last 30 years of our economic and urban development, design consumption and import have outstripped the supply and export of the local design cluster. Although the design industry cut across a spectrum of activities from industrial, environment and multimedia design to visual communications, there has been no concerted effort to measure, study and coordinate the development of this cluster in a more holistic fashion. And while the components of a design system (such as design education, design companies, designers, innovation centres, design awards and conferences, and various grants and assistance schemes) are in place, efforts to develop resources for this sector are fragmented. The challenge is to synergise and build up local resources and capabilities, to nurture and raise the standards of the design cluster to be able to meet the competitive needs in Singapore and globally.

Challenge 3: From Manufactured to *Designed in Singapore*
While design activities are estimated to contribute a total of 1.9% of GDP in 2000, the true value of design in Singapore is still not fully realised and captured. This is especially as parts or final finished products are often not Singapore products or marketed and branded as designed in Singapore. The challenge is not only to anchor more design activities (design projects, enterprises and expertise) in Singapore, but more importantly, to capture the full value of products and services designed in Singapore.

Challenge 4: From Technical to *Multidisciplinary Design Education*
The potential of design education and its significance as a creative thinking and innovation tool is not fully tapped in Singapore. Design has been mainly approached as part of a technical education. Current gaps in a professional art and design education at university level would also need to be addressed. The challenge is to move towards a more holistic multidisciplinary design education to develop design professionals who can position design more strategically as an integration of the aesthetic, business, technological and sociological concerns. At the same time, to embed design in the teaching and learning of other disciplines and capabilities, such as in business and engineering schools.

Challenge 5: From Low to *High Design Awareness*
There is currently a low awareness of good design – its role, significance and qualities – or of the design industry and profession. The challenge is to raise the current level of public awareness on the use and impact of effective design in all aspects of life, through the fostering of a more pervasive design culture.
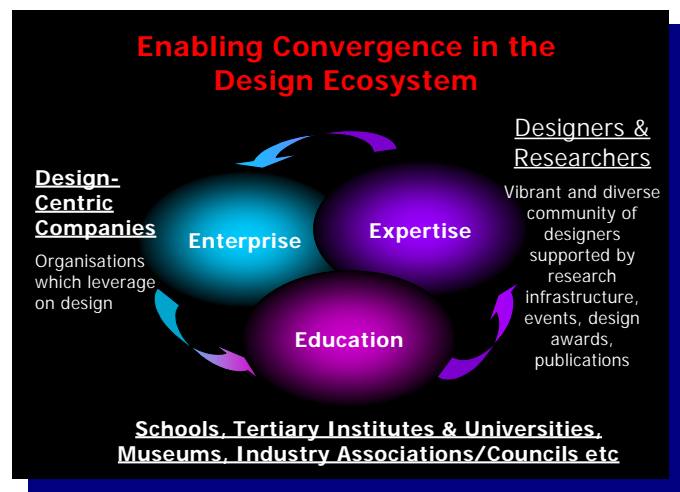
THE "DESIGN SINGAPORE" INITIATIVE

While design has been promoted as part of Singapore's industrial and trade landscape, predominantly as a business capability and tool, the need is to inspire a more fundamental change in the promotion and development of a pervasive design culture in Singapore. This change is premised on the new positioning of design as the creative integration of art, culture, business and technology, able to drive innovation and national competitiveness.

Our vision is therefore for Singapore to be *"A global cultural and business hub for the design of products, content and services, where design consciousness and creativity permeates all aspects of work, home and recreation"*.

This vision is encapsulated in four outcomes. One is for Singapore to be **a leading centre for contemporary design in Asia.** We aim to attract regional and international design talents to work from Singapore, nurture innovative design firms, as well as to be both a leading provider of design education and the launchpad for creative and innovative designs into Asia. The second is to evolve **a distinctive Singapore design and brand identity.** We aim for Singapore products and services to be embued with a unique design identity in the global market, and for the "designed-in-Singapore" reputation to be a valuable branding, synonymous with high quality, integrity, creativity and excellence. The third outcome is for design excellence to be **a competitive advantage for local enterprises**. The fourth outcome is **a pervasive design culture**: We aim to raise the general level of design awareness and discourse, where effective design is understood and integrated into in all aspects of business, leisure and recreation, public service and education in Singapore.

A National Collaborative Strategy

The "Design Singapore" Initiative is the first national collaborative strategy to spearhead the promotion of design and tap on our business, artistic, cultural and technological resources and capabilities. It will seek to bring about convergence amongst the different players in the design ecosystem: enterprise (industry users and designers), expertise and education

Enabling Convergence in the Design Ecosystem

Design-Centric Companies — Organisations which leverage on design

Enterprise

Expertise

Education

Designers & Researchers — Vibrant and diverse community of designers supported by research infrastructure, events, design awards, publications

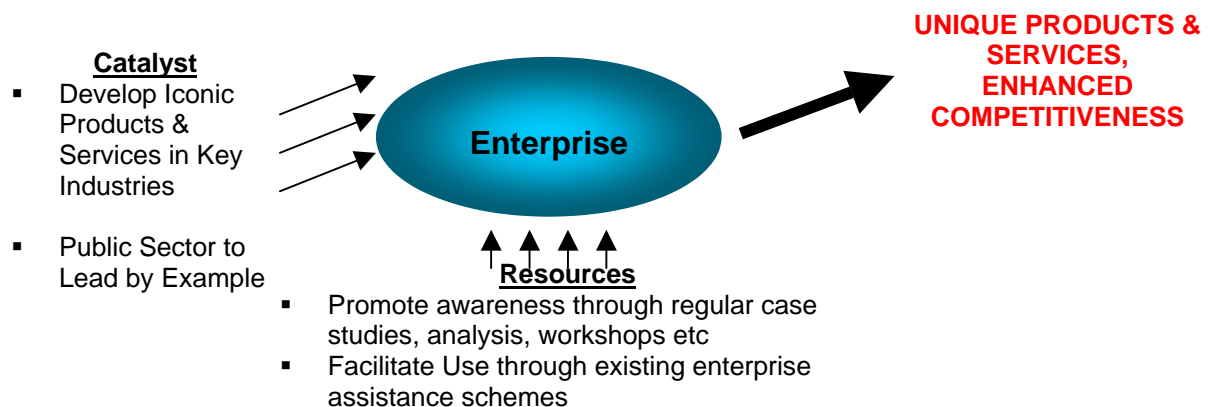Schools, Tertiary Institutes & Universities, Museums, Industry Associations/Councils etc

A multi-agency taskforce was set up to put in place a collaborative framework to promote and develop design excellence in Singapore. It will complete its study in *October 2002* in close consultation with international experts and industry players[6]. A summary of its preliminary strategies is tabulated in *Annex 3.2.*

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[6] In its deliberations the taskforce has since embarked on a Study Mission to Europe and Hong Kong. The countries visited include Hong Kong, Spain (Barcelona), Italy (Milan), Germany (Stuttgart, Essen, Frankfurt), Denmark (Copenhagen), Finland (Helsinki) and the UK (London). It has received inputs from an International Advisory Panel and has also consulted local industry players, educational institutions as well as international experts. (*Annex 1.4)*

Strategy 1: Integrate DESIGN IN ENTERPRISE

This first strategy recognises industry as a key driver of design, hence the need for industry to be equipped to leverage on design excellence, to embed design in their businesses and to get design into boardroom agendas.

Catalyst
- Develop Iconic Products & Services in Key Industries

- Public Sector to Lead by Example

Enterprise

UNIQUE PRODUCTS & SERVICES, ENHANCED COMPETITIVENESS

Resources
- Promote awareness through regular case studies, analysis, workshops etc
- Facilitate Use through existing enterprise assistance schemes

Recommendation 1.1: Identify and Develop Iconic Singapore Products and Services

As evidenced by the products and services of countries such as Germany (e.g. Braun, BMW) and Japan (e.g. SONY), and also smaller industrial nations like Sweden (e.g. IKEA) and Finland (e.g. Nokia), a distinctive design identity and its qualities are often synonymous with the branding of a country, and vice versa[7]. It is a mutually reinforcing process. It is proposed that we identify and develop potential iconic "killer applications" that would help establish the standard for design excellence in Singapore, and to jumpstart the design initiative in industries. This could begin with industries where Singapore already has existing strengths and a unique proposition. Examples of potential industries include the hospitality and entertainment industry, where the design of consumer experience is critical, or infocomms, healthcare and medical products, where design would be sensitive to ergonomics, lifestyle, styling and new technologies (see ***Annex 3.3***).

Recommendation 1.2: Promote Design in the Public Sector

To catalyse the development of effective design in Singapore and to nurture local design expertise, it is proposed that public sector agencies lead by example in supporting the use of effective design in its public buildings, amenities, services and spaces. This is the case in many countries, where the design of train/subway stations, bus stops, street furniture, parks and public buildings provide important

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[7] In the case of UK, the UK Design Council has set out to identify and promote innovative products and services created in Britain for the new Millennium, to showcase the competitiveness of British industry. The case studies and exhibition on these UK Millennium products have since travelled worldwide. Such initiatives are also common to other countries, such as Finland and Denmark.

opportunities to raise the standard of public service, develop both local design expertise and demand, and help profile a local design identity.

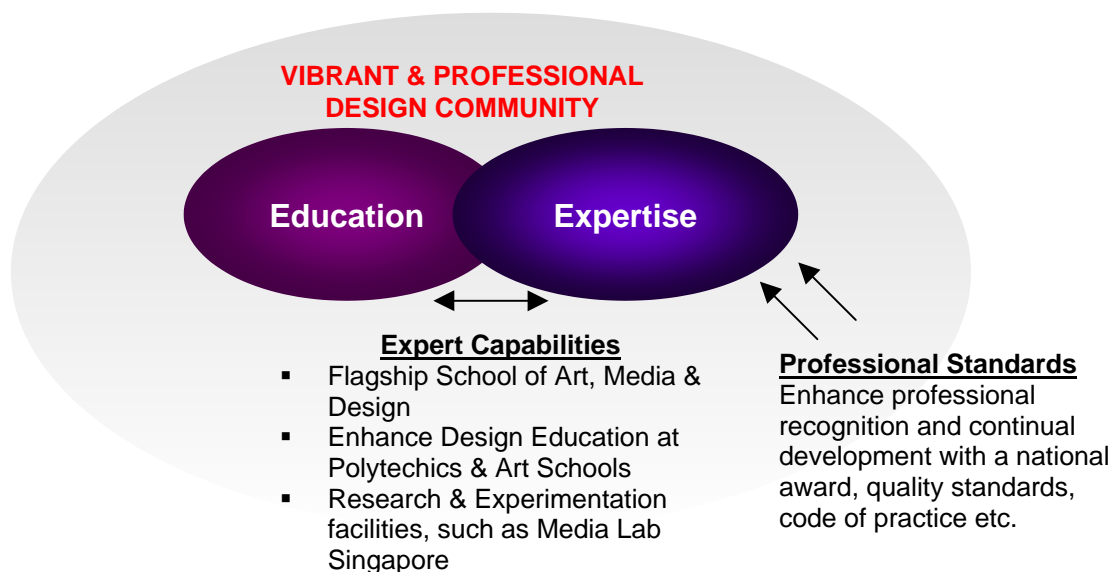## Recommendation 1.3: Raise Business Awareness of Design Excellence

Many companies, particularly SMEs, are not aware of the use and advantages of effective design. There is currently also no concerted effort to promote design to enterprises. It is proposed that there be a dedicated programme to develop regular case studies, surveys, global benchmarking, and other statistical analysis or tools as resources to promote design to companies.

Recommendation 1.4: Facilitate Use of Design by Businesses

There are currently many incentive and assistance schemes targeted at helping companies to redevelop their business processes, engage in R&D, internationalise, develop their manpower capabilities and so on. These include EDB's Start-up Enterprise Development Scheme (SEEDS), Research Incentive Scheme, and the Talent & Attachment Programme (TAP). IE Singapore also currently offers a grant of up to 50% of the company's cost in engaging a design consultant. Instead of proliferating the number of assistance schemes for businesses, it is recommended that we review the existing schemes with a view to encouraging the use of design.

Strategy 2: Develop a Vibrant & Professional DESIGN COMMUNITY

It is critical to nurture a vibrant design community in Singapore as the backbone of Singapore's design ecosystem, to raise the standard of design and provide the necessary expertise for both a sustainable growth of the design industry and a reputation for design excellence.

VIBRANT & PROFESSIONAL DESIGN COMMUNITY

Education   Expertise

Expert Capabilities
- Flagship School of Art, Media & Design
- Enhance Design Education at Polytechics & Art Schools
- Research & Experimentation facilities, such as Media Lab Singapore

Professional Standards
Enhance professional recognition and continual development with a national award, quality standards, code of practice etc.

<u>Recommendation 2.1</u>: Establish a Flagship University Programme in Art, Design and Media

A flagship art, design and media programme at university level would help raise a new generation of creative designers with a strong intellectual foundation in the arts and humanities, and skills to integrate technology and business in design. The programme would offer degree courses in fine arts, design and multimedia, and work synergistically with the industry in research projects. In addition, the new School of Art, Design and Media should target a diverse and global intake, to create both a vibrant environment as well as anchor young regional and international talents to Singapore. The School would also contribute to design education in schools as well as to continuing professional development (CPD) for designers.

<u>Recommendation 2.2</u>: Enhance Design Education in Secondary Schools, Polytechnics & Arts Schools

Our polytechnics have been offering diploma programmes in design for the industry in the areas of fashion, media, product, graphic and interior design. It is critical that they continue to develop their teaching programme. It is recommended that a more detailed review of the existing design programme be made to enhance the diversity of options for students while enabling polytechnics to excel in specific areas. This would be with a view to deepen the level of industry collaboration, raise the standard of the design programme, and allow a more efficient distribution of resources, including professional talents. At the schools level, resources need to be better directed to strengthen the Design and Technology programme in selected schools to raise the profile of design earlier in the education process.

<u>Recommendation 2.3</u>: Establish Design Testbeds

To build up Singapore's capabilities in the area of research and hothousing of design concepts, it is recommended that a network of leading design entities be established to create design incubation centres and testbeds. For this purpose, we recommend the establishment of a Media Lab in Singapore to engage in multi-disciplinary media research and development sponsored by the industry. This could be integrated into the School of Art, Media and Design at the university.

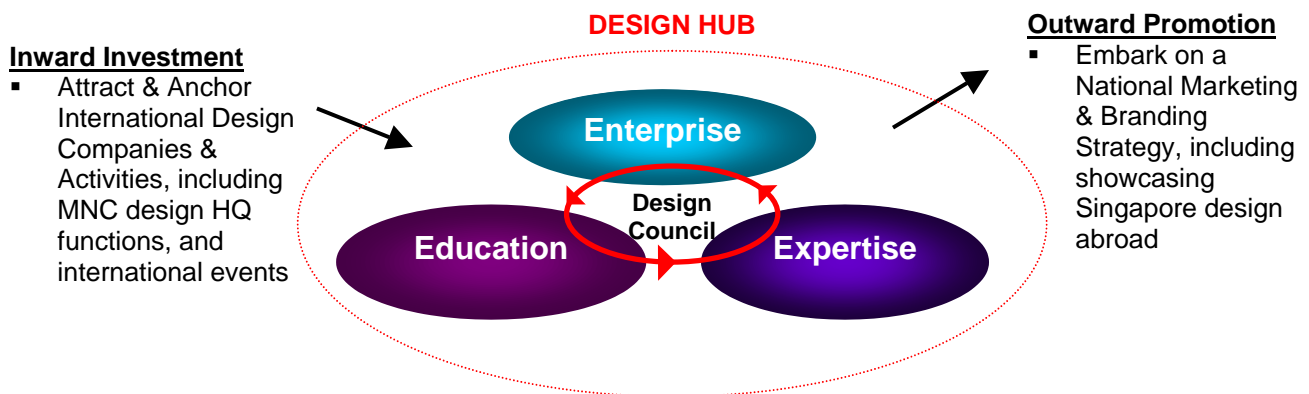**<u>Recommendation 2.4</u>: Enhance Professional Standing of Designers**

To raise the profile of the design profession, attract young talents to the industry and build up Singapore's design capabilities and standards, it would be critical to raise the professional standing of designers in Singapore. This would include enhancing the professional recognition by developing and implementing quality and performance standards for the industry, as well as professional codes of practice and conduct, in collaboration with industry and professional associations[8]. This would also include developing a continuing professional development programme for designers. At the same time, a new or existing award should be set as the highest national award for design excellence, and be formalised to an international standard.

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[8] Some industry and professional associations in Singapore include: the Designers' Association Singapore, the Singapore Institute of Architects, the Society of Interior Designers, the Accredited Advertising Agents Association, the Singapore Furniture Industry Council and the Textile and Fashion Federation.

Like the famous Compasso D'Oro, the top design award in Europe, the exhibits can automatically form a new collection of Singapore designs.

Strategy 3: Position Singapore as a Global DESIGN HUB

This strategy seeks to galvanise design-centric enterprises and organisations, design expertise and design educational institutes in Singapore so as to establish Singapore's reputation and position as a design hub.

Inward Investment
- Attract & Anchor International Design Companies & Activities, including MNC design HQ functions, and international events

DESIGN HUB

Enterprise

Education

Design Council

Expertise

Outward Promotion
- Embark on a National Marketing & Branding Strategy, including showcasing Singapore design abroad

Recommendation 3.1: Establish a National Design Council

While many components of a design ecosystem are in place in Singapore, there is still a need for a central organisation at the national level to champion the design cluster and synergise the activities and concerns of the various players. It is therefore recommended that a National agency for design be set up with representation at the highest level for industry, the design community, education institutions and the public sector. Such an agency would also allow Singapore to tap into the international design network, and with the other national design councils and organisations[9]. This agency would therefore be positioned to (a) forge links as the one-stop contact for design both locally and internationally; (b) nurture the local design industry; and (c) champion design excellence in Singapore.

Recommendation 3.2: Anchor International Design Companies and Activities in Singapore

To further grow Singapore's design capabilities, over and above nurturing local design expertise, it is proposed that we attract and anchor key international design firms to Singapore, as well as MNCs to locate their design functions and headquarters in Singapore. The latter would also allow us to better capture the full value of design in Singapore. In addition, while we develop a national award and local design events to international standards, it is recommended that we identify and actively seek to anchor at least one major international design award in Singapore, as well as to host international design conferences. This would allow Singapore to feature prominently in the international design network as a design hub.

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[9] Design Councils are well established in countries such as the UK, Spain, Denmark, Finland and Germany, and are partially funded by the government. Hong Kong has recently established a Design Centre to pull together previously fragmented efforts to develop design, and as part of the Government strategy to increase the level of innovation, to develop higher value-added products and services and nurture a creative skills base.

Recommendation 3.3: A National Marketing and Branding Strategy

Singapore has mainly used Expos and World's Fairs to promote its tourism but, unlike many countries, not fully exploited the opportunity to showcase its design efforts and profile its visions and challenges. It is recommended that Singapore's participation at such international platforms be carefully planned to advance the profile and visibility of Singapore's design capabilities and facilitate networking. It is further proposed that the promotion of unique Singapore design, products and services abroad be synergised with a national marketing and branding effort. This would require us to embark on a national branding strategy, with the involvement of the private, people and public sectors, to present a compelling and consistent Singapore story and brand.

Strategy 4: Foster a DESIGN CULTURE & Awareness

Recommendation 4.1: Embed Design in All Levels of Education

As design brings together arts, business and technology, design concepts and processes serve as problem solving tools, but more importantly, help to unleash students' creativity and develop a creative outlook. The taskforce proposes that design concepts and design as a tool be embedded to enhance the teaching of subjects such as art, business, engineering, communications and IT at the schools, polytechnic as well as university levels. This would help raise the level of design awareness and at the same time enhance the teaching in existing curriculum and courses.

Recommendation 4.2: Bring Design Everywhere

To raise public awareness on the significance of design and help foster a design-sensitive culture, it is proposed that a variety of design events and exhibitions be organised.
(a) <u>Community level:</u> the regular showcasing of design (both Singaporean and international), leveraging on the extensive museum and library network of the National Heritage Board and the National Library Board, as well as in community spaces, schools and shopping malls.
(b) <u>Specific Groups & Issues:</u> workshops, conferences and exhibitions targeting specific groups or organised around specific themes. This takes the example of the "Design-in-Business Week" or the "Design-in-Education Week" organised by the UK Design Council.
(c) <u>National Level:</u> It is further proposed that, to register the importance of design for Singapore's continued competitiveness, to designate a "Design Singapore" Year, to coincide also with the national marketing and branding strategy.

Recommendation 4.3: Design in the Mass Media

A key player in the design ecosystem, most clearly seen in countries such as Italy, Japan and USA, is the media – where journalists and various media platforms play a central role in promoting design both locally and globally. It is proposed that an active media programme be pursued to raise the profile of design.

CHAPTER FOUR:
MEDIA 21

INTRODUCTION

This chapter considers the state of the media industry and identifies the challenges and opportunities for this sector to contribute more significantly to Singapore's economy. It spells out the vision and strategies to develop Singapore into a vibrant global media city.

CURRENT STATE OF MEDIA INDUSTRY

Global spending on entertainment and media in 2001 exceeded US$1 trillion and is expected to grow to US$1.4 trillion in 2006 at a projected compound annual growth rate (CAGR) of 5.2%[1]. Within this sector, media industries (TV - satellite, cable and station - and filmed entertainment) are expected to perform well with a projected CAGR of 6%. Media spending in the Asia Pacific was estimated to be around US$215 billion in 2000 and it is predicted that the region will experience a healthy growth of 5.3% on a compound annual basis.

The key drivers of growth of the global media industry are:

(a) an increased demand for knowledge, information and entertainment spurred by the knowledge economy;

(b) growth of broadband networks and usage which has created large highways on which attractions (or media content) can be developed and marketed; and

(c) technology advancements, particularly digitisation, which have transformed the whole value chain of the media industry.

Domestically, the value-added of the media sector grew at an annualised rate of about 7.7% from $1.2 billion in 1990 to $2.6 billion in 2000. This contributed to 1.6% of the GDP in 2000. Media exports have been weak, but gradually improving: export figures grew from $631 million in 1990 to $908 million in 2000 at an annualised rate of 3.7%. The media sector comprised more than 3,500 establishments, employing a total of 37,000 employees.

Singapore's traditional approach towards the media has been focused on content regulation for social relevance and national interest. Previous industry development

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[1] Source: *PriceWaterhouseCoopers* "Global Entertainment and Media Outlook: 2002-2006

efforts have succeeded in attracting foreign media players to Singapore. However, these players have largely used Singapore only as a distribution base: Singapore is the regional distribution base for 16 of world's major satellite TV broadcasters and some 200 publishers.

There has been little investment at the higher end of the media value chain, namely the creation, development and financing of media copyrights. In the case of broadcasting, Singapore's production industry is valued at US$118 million, or US$121 million less than Hong Kong, US$170 million less than Australia, and billions less than Germany, UK and US. Local content forms a mere 33.8% of total programming, compared with 50% for Australia and over 60% for Germany, Hong Kong and the UK[2].

The local film production industry generated around US$4.7 million with a combined broadcast/film talent pool of 3,623. Canada, in comparison, produced an estimated US$2.95 billion and generated 46,000 full-time direct jobs in the film industry. Canadian film exports reached US$1.3 billion. Australia produced US$1.16 billion with a manpower pool of 34,200. Hong Kong's film exports amounted to US$70 million, generated by a manpower pool of over 5,000[3].

Despite the relatively small size of the local media industry, we have had our share of success stories. Local artistes in the music industry, such as Kit Chan, Stephanie Sun, and Tanya Chua, have established themselves as credible artistes in the region. Song writers such as twin brothers Paul Lee Wei Song, Peter Lee Si Song and Dick Lee have been composing songs for top Taiwanese and Hong Kong artistes[4]. Many local TV productions have won international awards[5]. With the formation of the Singapore Film Commission, the film industry is witnessing a notable revival following decades in the doldrums. These achievements point to a new confidence that Singapore can build a thriving media ecosystem to capture new opportunities and generate new value.

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[2] Source: Spectrum study 2001, Zenith Media.
[3] Source: PriceWaterhouseCoopers, SFC Commissioned study, 2001.
[4] Paul and Peter Lee are joint directors of the Lee Wei Song School of Music. Between them, they teach, produce, write and sing Mandarin and Cantonese songs. Peter Lee won the Best Composer Award in Taiwan's Golden Melody Awards, while his student, Stephanie Sun, won the Best Newcomer Award (2001).
[5] Many of the SBA-funded PSB programmes have attained international and regional recognition, which testifies to the high standards set by our local TV production industry. These include awards from the acclaimed New York Festivals (*Third Age, Go Green, Big Q, Virginity – Price or Prize, Downs Syndrome - I am Stephen* and *Millennium Challenge: Vietnam)*, US International Film & Video Festival *(Kau Istimewa (Extraordinary People) and Klinik Kita (Our Clinic))* and Asian TV Awards (*Gateway Asia – The New Asians (The Filippinos), Kids United, AlterAsians* and *48 on Aids).*

SWOT ANALYSIS

Strengths

- We have an educated and skilled workforce, complemented by a friendly business environment, good infocomm infrastructure and global infocomm connectivity.

- We are already recognised as a good regional base for the distribution of satellite TV, recorded music and publishing. Major global media players and satellite broadcasters have established regional bases in Singapore. We have two local players, namely, Singapore Press Holdings, which has an annual turnover of over S$1 billion in FY 2001, and the MediaCorp Group, with an annual turnover of S$423 million. Both these companies perform the full value chain of activities from film and TV production, to publications and online content.

Weaknesses

- We have a limited domestic market size. Our advertising market is only US$412 million, compared with China's US$5 billion and Hong Kong's US$1.8 billion (**Table 1**). The implication is that growth will have to be derived from hitherto untapped areas, or from exports.

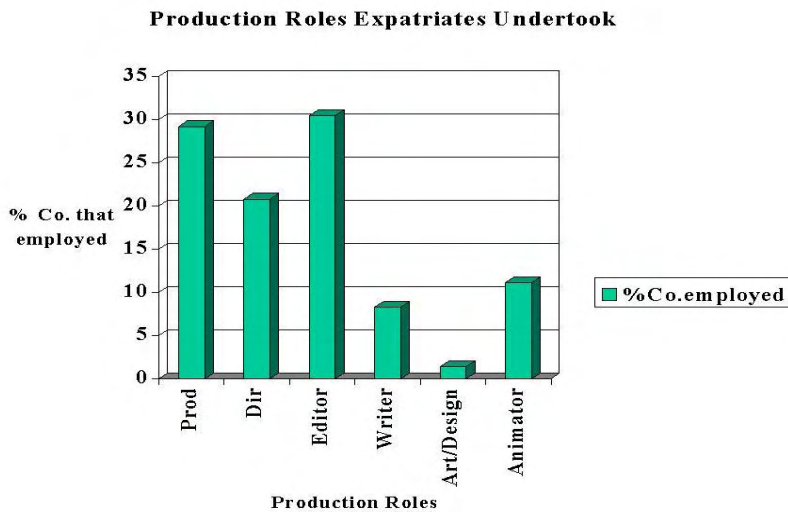**Table 1: Asia Pacific Advertising Per Capita Jan-Jun 2001[6]**

Countries (in order of size of ad pie)	Advertising (US$m)	Population(m)	Advertsing per Capita (US$)
China	5,354	1,267	4.23
South Korea	2,126	46.9	45.33
Hong Kong	1,810	6.8	266.18
Australia	1,497	19	78.79
Philippines	633	75.8	8.35
Thailand	573	61.1	9.38
Singapore	412	3.9	105.64
Malaysia	386	22.7	17.00
Indonesia	334	22.7	1.60
New Zealand	339	3.8	89.2

- We face a shortage of local creative manpower, such as above-the-line (director, producer, scriptwriter, director of photography, key cast) talent. **Chart 1** below shows the key roles expatriates were employed in[7].

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[6] Source: AC Nielsen Adex, Asia Pacific Market & Media Fact 2001
[7] Survey of manpower needs of the TV and film industry, NTU (2001).

Chart 1: Key Media Roles that Expatriates were Employed In

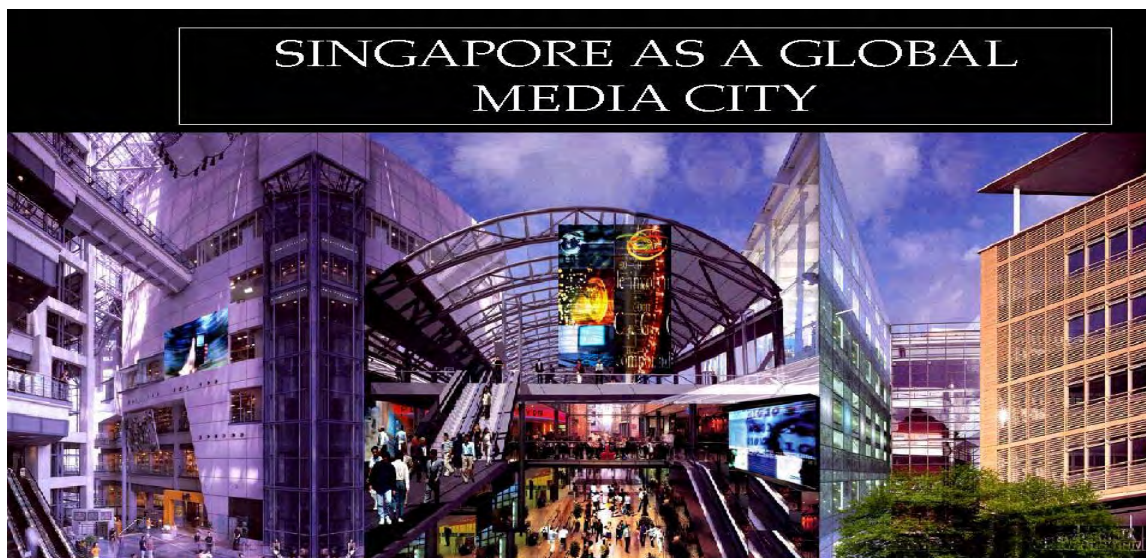Production Roles Expatriates Undertook

Opportunities

- The global conversion to digital production and distribution presents an opportunity for Singapore to carve a niche, as we have a ready pool of computer science graduates. The challenge is to attract and train them to serve the needs of global media players.

- Our multicultural and multilingual talent base is a largely untapped advantage in the media sector. Foreign companies are keen to exploit the anticipated growth in China's demand for media and entertainment. Singapore has the potential to establish itself as a gateway for media content.

- While it remains difficult for media companies to secure financing from banks and private investors due to the current inability to assess the chance of success of a media project, the strong financial sector could potentially provide the financial backing for local media companies to experiment and venture into bigger projects.

Threats

- Regional governments also have plans to develop media hubs, which threaten to draw resources (talent, investments, etc) away from Singapore. For example, Australia is pursuing an aggressive plan to develop screen content and to attract foreign investment in film production. Hong Kong, Taiwan, South Korea and increasingly, China are attracting media businesses. The growth of rival media hubs and the ease with which media businesses can relocate their operations indicate an urgent need to widen the breadth and scope of our media ecosystem.

Media 21 envisions Singapore as a global media city, a thriving media ecosystem with roots in Singapore, and with strong extensions internationally. Economic value is derived from being a trading centre for copyrighted media material and from specialising in high-end media development. Media 21 also envisages made-by-Singapore media products that travel successfully overseas. Local media companies benefit from the overall levelling up of industry standards and are able to compete more effectively against foreign content to retain Singaporeans' hearts and minds.

Media 21 embodies a paradigm shift from the perception of the media as a mere means of mass communication to an inter-dependent ecosystem of the full range of media industries, from traditional print and broadcasting to the wider creative industries, such as film and publishing, to new areas of convergence such as digital and online media. Within each industry is a whole cluster of activities ranging from content production and distribution (including pre-production, production, post-production, packaging, marketing and distribution), enabled by IT and technology and fuelled by business opportunities and entrepreneurship.

Specifically, Media 21 envisions the following 10-year targets:
a) Increased economic significance of the media sector from 1.6% to 3.5%[8] of the GDP;
b) Increasing the total export value fivefold from S$908 million[9] to S$4.5 billion;

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[8] This requires that the media sector's contribution to GDP increases to 7.5%, assuming a GDP growth of 4%.
[9] This assumes an annual growth rate of 6%. Between 1990-95, exports grew by 12.9% without significant government support.

c)   Growth of at least 3 local media companies with offshore revenues exceeding S$250 million[10].

STRATEGIES AND RECOMMENDATIONS

The key approach is to capitalise on Singapore's existing strengths in order to level up and leapfrog our competitors. Media 21 proposes 5 strategic thrusts:

1.   Develop a State-of-the-Art Media City
2.   Position Singapore as a Media Exchange
3.   Export Made-by-Singapore Content
4.   Augment the Media Talent Pool
5.   Foster a Conducive Regulatory Environment and Culture

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[10] Some potential Media Singapore Inc companies initially identified include: Singapore Press Holdings (including SPH Media Works), Times Publishing, Media Corporation Ltd (including Raintree Pictures and MediaCorp TV), Cathay Holdings Pte Ltd, ST Telemedia and Singapore CableVision.

Strategy 1: Develop a State-of-the-Art MEDIA CITY

Several "media cities", or specific geographic zones earmarked for media companies, have sprouted over the past year. These include Seoul's Digital Media City, Dublin's The Digital Hub and Dubai's Media City. These "media cities" have allowed the governments to focus marketing and development efforts and to create a "cluster" effect by co-location of companies across the media value chain. The common characteristic among these projects is the commitment of government resources (including funds) to develop and market these specific areas and to incentivise companies and selected institutions to locate there.

Global Media Cities

- Dubai Media City (DMC) is spread over 200 hectares of land. It is established by the Dubai Technology, E-Commerce and Media Free Zone Authority. DMC is the personal project of the Crown Prince to develop Dubai into a global media hub by providing infrastructure and synergistic environment for media companies, from Dubai city and international communities, to operate. DMC also aims to offer world-class living options to professionals working in the media environment. DMC is creating an innovative concept providing a complete 'live-work-and-play' environment.

- **Seoul City's Digital Media City (SDMC)** was conceived as a specialised innovative complex with the specific vision to evolve into a world-class production centre for digital media contents and to be a world-class centre of academic-industrial cooperation in digital media technology. With a size of 560,000 square metres, SDMC is a one-stop service to Korean and foreign businesses and investors. It will lead Seoul's economy and will serve as the gateway linking Seoul to East Asia and the rest of the world, in 2010 when the project is completed.

Recommendation 1.1: **Develop Mediapolis @ one-north**

We recommend the creation of a media city to capture public and industry imagination, to re-brand our media industry and to underscore government commitment to develop this sector. We have identified JTC Corporation's one-north as the ideal location as it embodies a visionary plan for a state-of-the art work, live, play and learn environment for media and infocomm companies, and the artistic community.

"An organisation like Mediapolis is very important as it can provide us the whole environment to integrate training, marketing and managing."

Lee Yong-teh
Chairman, Trigem Computers

Mediapolis@one-north will be differentiated from other media cities by its emphasis on digital media creation and experimentation, futuristic design, its state-of-the-art facilities and infocomm and financing infrastructure, its competitive pricing and the co-location of ICT companies, creative media industries and a vibrant R&D community.

In particular, we have identified the need for a digital media lab (Recommendation 1.2), a digital production studio (Recommendation 1.3) and a TV broadcasting station as ideal key tenants at the Mediapolis. The soon-to-be formed Media Development Authority (MDA) will also be located at one-north to provide one-stop

industry concierge and facilitation service to media companies both at one-north, as well as in other parts of Singapore.

We recommend the endorsement of Mediapolis@one-north as the icon of Singapore as a visionary Global Media City. Government agencies (such as EDB, JTC, MDA and Infocomm Development Authority (IDA)) will adopt a collaborative strategy to attract a cluster of creative and hi-end media companies, and promote digital research and development.

Recommendation 1.2: Enhance Applied Research in Digital Media

The major trend in the media and entertainment industry is the shift to digital technology across the value chain, from production and user interface to distribution and storage. For broadcasting and new media, digital technology enables interactivity e.g. interactive TV, multi-user gaming, T-commerce, as well as new consumer experiences and devices. In film and TV production, digital technology has changed the way films are created. There are now films with

> "Every medium, from print to film, is screaming out for unique digital content that can be called fine literature. I believe that the emergent order will be the inevitable result of efforts by artists rather than technocrats."
>
> *Roy Stringer*

fully computer generated images without physical sets or human actors (e.g. *Toy Story, Walking with Dinosaurs, video games),* and productions with strong digital effects (*Lord of the Rings, Harry Potter movies, Star Wars Trilogy, Buffy the Vampire Slayer).* Digital productions typically garner over 50% of a total film/TV budget for the former category, and between 20% to 30% for the latter category.

One implication of the shift to digital technology is the increasing demand for innovative applications, services and devices. Singapore can capture this growing demand by anchoring a strong applied R&D laboratory such as MIT's Media Lab in Singapore. This will create significant value for Singapore in terms of a dynamic flow of talent and ideas, opportunities for our research talent and indirect benefits of attracting foreigners (top media research talent, business partners) to Singapore and an enhancement of Singapore's branding as a Global Media City.

Moderate government investment and strong government backing will be necessary to establish a successful R&D centre like the Media Lab at MIT[11]. One way in which Singapore can add value to media R&D might be to capitalise on our expertise in Asian languages and translation capabilities as well as our knowledge of Asian culture with a view to developing applications tailored to the Asian market.

Recommendation 1.3: Specialise in Digital Post-Production

Currently, Singapore does not have the facilities or capability to support the digital production/post-production requirements of an international big-budget film. We

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[11] We understand that the total cost to establish a digital media lab is about US$35 million with a recurring operational cost of approximately US$45million and that MIT Media Lab is interested in locating a "satellite" lab in Asia, in addition to the original one in the MIT campus, a branch in India and a new site in Dublin.

should address this critical area in view of the anticipated demand once Singapore becomes an Media Exchange.

Specifically, we recommend the following:

a.   Establish a multi-disciplinary digital post-production studio capable of supporting computer animation and a virtual film studio. Currently, Singapore lacks a state-of-the-art digital post-production facility to support an effects-heavy film like *Lord of the Rings*; filmmakers have to go to Thailand or Australia for post-production. There is an urgent need for a studio with state-of-the-art equipment to support the targeted volume and quality of production;

b.   Attract high end post-production companies to Singapore by extending Pioneer Status to this group of companies; and

c.   Augment talent and skills in digital post-production.

Recommendation 1.4: Expedite National Deployment of Digital Media Services

To support the digital media investment thrust and the positioning of Mediapolis as a test-bed for new media services and devices, we recommend accelerating the nation-wide digital TV (DTV) rollout and the deployment of digital TV services, content and applications. We will also need to incentivise R&D in enabling software and technologies through seed funds and facilitate industry wide training of DTV manpower through schools, seminars and conferences. We can also establish Asian chapters of international standards bodies, like DVB and W3C, in Singapore.

Strategy 2: Position Singapore as a MEDIA EXCHANGE

Historically, Singapore has played a role as a trading port for rubber, even though it was not a major source of rubber. Similarly, strategy 2 essentially combines media financing and copyright registration to enhance Singapore's attractiveness as a media exchange. This will enable Singapore to establish a strategic foothold in the creation and acquisition of media copyrights (films, TV and publishing), which is the new currency of the Knowledge Economy. This will generate direct benefits for the media industry as it taps on international ideas for new media products (films, new TV formats etc) and brings new opportunities for the financial and legal communities, as well as spillover benefits for the production and post-production sectors.

There is a current gap in the availability of funds to finance core copyrighted material in media, namely films, TV projects[12], and to a lesser extent written material. Film and TV budgets are increasing, from a few hundred thousand dollars in the past to over $50 million for a blockbuster film, and over S$50,000 for a TV production. Producers have been attracted to cities that offer lower cost financing options.

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[12] This is derived from strong feedback from international players.

Countries like Australia[13], Canada, the United Kingdom and even Malaysia and Thailand have been successful in luring Hollywood producers to fund and produce large scale film and TV projects through attractive tax regimes (see Annex 4.1 for a list of tax incentives and schemes of selected countries).

In the fifties and sixties, Singapore was a regional hub for the film industry; this position died out due to a variety of reasons[14]. Currently, despite Singapore's reputation as a regional financial centre, it remains difficult to secure financing for media ventures from private companies and financial institutions. Traditional financial institutions such as banks and venture capitalists hesitate to invest in media projects as they generally have no experience in assessing the risk of investments in such projects. This is compounded by the fact that the smaller media companies have problems securing bank loans due to the inability to provide company-owned assets as collateral.

We can capitalise on our position as a base for the world's major media companies and our financial position to carve a niche for Singapore as a financing and trading centre. To do this, we will need to make available in Singapore an attractive range of financing options, from equity funds, to investment and loan funds. The window to do this is small, as other burgeoning film/media hubs have already put in place and are constantly reviewing their tax incentives to attract investments in TV and films, thereby lowering Singapore's competitive advantage.

Recommendation 2.1: Introduce Tax Incentives to Attract Media Investments

There is currently no specific tax incentive to attract investments in media copyright production, which leads to minimal private sector investment in films and TV. To make Singapore an attractive media financing sector, it is recommended that the government introduces tax incentives to encourage private investment in the production of copyrighted material.

Specifically, tax breaks are recommended for investment in MDA-certified copyrighted material. The incentive will be tied to pre-qualifying conditions like specifying employment of a specified proportion of domestic labour or that a portion of the production must be done within Singapore, with specific definition of what constitutes production. Depending on the incentive package, the economic spin-offs include:

    a.   generating business and employment in other sectors (e.g. in catering, transport, carpentry for set construction, hotels, set/costume-designing, grips and gaffers);

    b.   development of the legal (intellectual property rights, contracts, etc), financial (loans, investments, venture capital) and insurance (completion bonds, etc) markets; and

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[13] According to a recent survey of LA-based film producers by the Australian Film Commission, 50% of rated tax incentives as a key consideration to move runaway productions to Australia. The other key consideration was the favourable exchange rate. Foreign productions now comprised over one third of the overall $331m (A$600m) expenditure in Australia, a rise of 139% over the last 5 years.

[14] This is no official record of the reasons why the film industry dissipated post independence. One key reason could be the gradual decline of indigenous SEA films.

    c.   revenue and employment for direct film/TV industry (producers, directors, actors, scriptwriters).

These incentives will help enhance Singapore's reputation as a centre for media financing and increase demand for post-production. This complements the strategy to specialise in digital media.

<u>Recommendation 2.2</u>: **Establish a Loan Fund for Copyrighted Media Material**

The Singapore government can also play the role of initiating and forming a Loan Fund, in partnership with private sector companies. Existing financing institutions are unable to fill this gap, as they lack the expertise to assess the risk of films and TV programmes. There is less politics and national pride surrounding financing, so there will be minimal political hurdles for Singapore to play this role. The loan fund will give Singapore an edge over our competitors who do not have such a scheme in place.

The objective is to attract copyright projects from the Asia-Pacific region to Singapore for financing. Funds will be loaned at a competitive rate, plus a share of profits. In the case of default, the borrower will transfer the copyright of the project to the loan agency. Overall risks to Singapore are low for the following reasons:
    a.   the default risks will be amortised over many projects;
    b.   an initial credit worthiness assessment would have been done; and
    c.   As long as the project is completed, there will be always be some returns/value (for example, it can be sold to content hungry satellite/cable companies hungry for content).

Industry representatives have given feedback that the loan fund must have at least US$200million to make an impact. The government does not need to provide full funding, as private companies have expressed interest in such a venture. The assessment is that government would need to set aside at least 25% of the initial fund, which can eventually be self-financing.

<u>Recommendation 2.3</u>: **Attract Media Finance Companies and VCs**

We recommend attracting specialised media finance companies and venture capitalists to base their operations in Singapore. This is linked to the overall strategy to attract media companies to Singapore for financing, as finance companies and venture capitalists will only consider Singapore if there is a vibrant media industry to support their business.

<u>Recommendation 2.4</u>: **Create and Manage a Registry of Media Copyrights**

Currently, unlike US where Intellectual Property Rights (IPR) laws are well established, it is extremely difficult for companies to determine who owns the copyright to each aspect of the media product, in which country/city or which window

the copyright is owned. There is no central agency that maintains such information. Industry representatives have given feedback that Singapore's reputation as a corruption-free state, with a transparent judicial system, stands us in good stead to establish Singapore as a trustworthy and reliable base to set up a copyright register. The objective is to encourage companies to obtain IPR registration in Singapore, and tap on Singapore's judicial system to seek redress for infringement. MDA will further study the feasibility of this recommendation together with the Intellectual Property Office of Singapore (IPOS) and industry bodies.

Recommendation 2.5: **Grow Media Markets @ Singapore**

Currently, the various broadcast, film and publishing events are peppered haphazardly throughout the year. Very little trade in films and TV are done in Singapore. In Asia, Hong Kong is attempting to grow its Hong Kong Film Mart. We recommend creating focal events, or, more specifically, media festivals incorporating media markets in partnership with established international markets. The aim is to attract trade professionals, buyers and sellers to Singapore over 7–12 day periods. We aim to make Singapore's media festivals the must-attend events for those who matter in the media industry. We also recommend establishing Media Awards of a level of prestige as to be meaningful and significant. Awards serve to recognise talent, spur competition, and enhance the glamour of the industry. Once established, the awards will also enhance the value and marketability of the award-winning content/talent.

Strategy 3: Export Made-By-Singapore CONTENT

The development and sale of copyrighted material (films, TV programmes, books, multimedia content) is the raison d'etre of the media industry and serves as the underlying engine to drive the media industry. Singapore's content development efforts have largely focused on the domestic market, to serve the needs of the domestic audience. This focus has resulted in content that tends to be colloquial and not tailored to the export market.

> "Why build pipes if you don't have anything decent to put down them?"
>
> *Peter Bazalgette*

Focusing on the domestic market has had two implications. First, the potential market size, and consequently the operational budgets is limited. For example, a one-hour local drama would average S$60,000 whereas a comparable UK drama would enjoy a production budget of around S$1.2 million[15]. Second, the economics of the global media market is such that international players are able to amortise their costs across large markets. For example, a local TV production may cost up to S$60,000 to produce, whereas an equivalent foreign production would cost only $3,000 to acquire.

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[15] This includes cost of living and exchange rate differences.

The way to overcome the limitations of the small domestic market is to create content specifically for export. Given our small talent pool, we will need to adopt a collaborative approach that embraces foreign partners and talent. Content need not be made entirely in Singapore, or entirely by Singapore-owned companies or talent. This practice is not new. The Singapore Broadcasting Authority (SBA) has initiated co-production agreements with Canada and Japan with the aim of tapping on the funds, talent and distribution networks of these overseas counterparts.

Recommendation 3.1: Establish a Content Development Fund

Countries such have Australia and Canada have complementing tax incentives with funding schemes (*Annex 4.2* gives a description of the various schemes in place in selected countries). We recommend the establishment of a content development fund, initially for films and TV. The objective of the fund is two-fold:

    a.   To boost the range and quality of local films and TV for export. Collaboration with foreign partners and use of foreign talent will be needed to bridge the talent shortage. Hence, projects need not be fully Singapore-owned or produced entirely in Singapore. Local companies can tap on the content development fund and work with foreign partners to produce TV or films; and

    b.   To increase the range of financing options for media companies as part of the strategy to position Singapore as a Media Exchange.

Currently, the total budget for TV and film productions is S$2million per year[16]. To build up a credible local TV and film industry, we will need to build up a minimum pool of S$50million per year[17]. As the aim is to develop content that can be sold in the wider international market; funding proposals should be required to incorporate marketing and distribution, in addition to content creation and production.

Recommendation 3.2: Develop Niche Genre

We should capitalise on our competitive strength to develop genres with a higher chance of international success. We have initially identified 3 potential genres: education, business, documentaries and digital animation. There is growing demand for educational content, particularly demand for language education (esp English to the Chinese market), pre-school and academic content. However, we have not been able to tap on the rich pool of educators, as there is no incentive for them to be involved in media development.

Two other genres which Singapore can specialise in are business content and documentaries. The market for business information was US$69 billion in 2001, and is projected to grow at a compound annual rate of 5%. The economy is expected to play a key role in this development, with dampened demand in the near term but

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[16] This comprises SBA's S$1 million co-production budget and SFC has a total budget of S$5 million over 5 years. The amount excludes Public Service Broadcast funding of S$100 million for national and non-commercially viable programmes.

[17] Source: PWC Consultancy Study for the Singapore Film Commission.

propelled spending upon recovery and as China's market opens. We can tap on the pool of knowledge and talent (business and financial analysts) in Singapore to develop this genre. CNBC and Bloomberg currently draw on a healthy pool of local talent to staff their business news programmes[18]. We also have a pool of producers with experience in producing documentaries, which can be nurtured to develop content for export[19].

Digital animation, with a total value of US$25.4 billion in 1999, is another niche genre for which Singapore can carve out a niche, given our strong IT skills base. A subset of this is video gaming, which had a global market size of US$3 billion in 2001.

We recommend that the Ministry of Education (MOE) considers incentives including allowing teachers to receive royalty payments for copyrighted work, and consultancy payments for advisory roles in media projects.   We also recommend developing these genres through allocation of the content development fund (Recommendation 3.1), training and development schemes as well as collaboration with strategic overseas partners to boost the quality and exportability of these genres.

Recommendation 3.3: Increase Bilateral Co-Production Agreements

The government can help open doors for local companies to partner foreign players by signing agreements with targeted overseas governments. This will pave the way for local companies to enter into joint ventures and co-productions with foreign players. This will also give them access to foreign production expertise, funds, and more importantly, foreign distribution networks and markets.

Recommendation 3.4: Increase Exports Promotion

MDA could work in partnership with IE Singapore and SPRING Singapore to strengthen export promotion of media products and services. For a start, this can include leading missions overseas to give local players more exposure and to facilitate trade. MDA can also facilitate the setting up of promotional booths at key international media events such as MIPTV and MIPCOM (France)[20] for broadcasting as is done presently by SBA or help good films gain entry to key film markets and film festivals.

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[18] Bloomberg employs 137 staff, of which 112 are local. CNBC employs 173 staff of which 136 are local.

[19] The market size for documentaries is not available, but has not been identified as a key growth market.

[20] MIPTV and MIPCOM are premiere global TV markets and Sundance is the premiere film festival for independent films.

Strategy 4: Augment the MEDIA TALENT POOL

Recommendation 4.1: Establish a Media Academy

The key training needs in traditional electronic media are scripting, directing, camera work, sound, lighting and video editing. We recommend the establishment of a Media Academy in collaboration with international media schools to train professionals in broadcast and film. This is a gap not currently filled by existing educational institutions. The academy will be a breeding ground for both local and foreign broadcasters and production companies to spot and attract creative talents. The availability of good talent will initiate a cycle of attracting employers (foreign broadcast companies basing their production operations in Singapore), raising the profile, and thereby attracting more talent. The Academy could work closely with industry to identify the skill requirements and collaborate with the Digital Media Institute for digital media skills development.

Recommendation 4.2: Enhance Specialist Skills

We should develop core competencies to support content development. In particular, we should focus resources on enhancing creative writing skills, the art of drawing and illustrating and across all media. SBA has started a National Scriptwriting Masterclasses and competitions for broadcasting scripts. This should be expanded to writing for various categories of media, including publishing, film and new media. Competitions will be an avenue for budding scriptwriters to gain

> "*There is no art without business. And to that end, it is imperative that the artistic youth...can find a venue and find a commercial outlet through media and film and TV production.*"
>
> Richard Taylor

national and international recognition. The entry scripts can also serve to inspire more and better ideas for new scripts. Separately, MDA will need to work with industry, seminar organisers and the Media Academy to organise specialist training in other skills including media financing and intellectual property rights.

Recommendation 4.3: Create Opportunities for Exposure to World's Best

Owing to our small domestic market and our relatively short history, local media industry players lack exposure and experience to be able to build a credible portfolio. To help overcome this shortcoming, we will need to engage academic institutions (like the NTU School of Communications and the polytechnics) and the industry to develop apprentice and other schemes for young talent to work with both local and foreign professionals in and out of Singapore. These will allow the local practitioners to learn from the world's best, and to help them master their craft.

Recommendation 4.4: Embed Media Training into School Curricula

At a fundamental level, MDA should work with MOE to enhance creative writing and drawing skills at pre-school, primary and secondary levels. This can be incorporated into language and literature curricula, to build up creative writing and story telling and story boarding skills. At secondary and tertiary levels, videography and graphics skills training can be developed to enhance project work.

Recommendation 4.5: Enhance Knowledge of Intellectual Property Rights (IPR) and Digital Rights Management Tools

The key to maximising the return on investment in original creation is the ability to export content and to deliver content on multiple platforms. The acquisition and protection of intellectual property is therefore vital to retaining the value. Many in the media industry are not well-advised in this area. MDA should conduct training and consultancy to help enhance industry knowledge of the complexities of IPR laws and protection as well as the latest developments in digital rights management tools.

Strategy 5: Foster a CONDUCIVE REGULATORY ENVIRONMENT and Culture

Recommendation 5.1: Ensure Policies and Procedures Meet International Best Practices

A conducive regulatory environment is critical for businesses to flourish. In order to be recognised as a global media city and attract global players, MDA will need to ensure that its regulatory policies and business practices meet international best practices and can stand up to international scrutiny. For example, in developing a framework to foster healthy competition, MDA must draw on international experiences and formulate a framework that is consistent with global practices, whilst adapting the local context where applicable.

Recommendation 5.2: Ensure Regulatory Consistency and Clarity

MDA must aim to streamline various regulations and standards for film, TV, radio, publications and new media so that the rules across the spectrum are clear and consistent. It would need to constantly review regulations and engage in industry and public consultations to ensure that regulations are relevant. MDA would need to ensure that regulatory policies and content

"You have a brand problem around society and control….US is getting more conservative on these issues while Singapore is getting more liberal… There is an opportunity to reverse the brand of Singapore. This could have secondary economic impact… America is looking at Singapore society closely to see how balance can be struck between being open and closed."

Paul Saffo

standards do not stymie creativity, whilst maintaining social harmony in Singapore.

Recommendation 5.3: Facilitate a Production-Friendly Environment

To make Singapore an attractive place for content development, MDA would need to work with various agencies to streamline rules and regulations to facilitate location shoots.   One possibility is to create confined production-friendly locales such as Sentosa or the offshore islands where constraints on production shoots and stuntwork can be minimised.

> "Production crews can't film a crime scene on the streets without needing to seek numerous permits and approvals from various authorities, only to be told after several weeks that they are not allowed to do it. To make Singapore an attractive place for media companies, MDA will have to create a 'production-friendly' environment in Singapore."
>
> Extract from Media Roundtable Report

Recommendation 5.4: Encourage Industry Responsibility and Responsiveness

To complement the push to streamline regulations and create a conducive business environment, MDA should encourage the formation of industry associations where where is sufficient critical mass. Such associations will enable industry practitioners to undertake more responsibility for industry skills upgrading and adopting good conduct practices. Such associations can also serve as a channel for constructive feedback to government for public policy formulation. To facilitate the formation of such associations, MDA could consider providing seed investment to ramp up initial operations.

Recommendation 5.5: Increase Public Education and Empowerment

In the multi-channel, globally networked media environment, regulations alone are insufficient and increasingly ineffective to safeguard the young against offensive and undesirable content. MDA must double its efforts to educate the public on tools and tips to safeguard against undesirable content. It must also explore new ways to empower the public e.g. through the introduction of content classification systems and content management tools.

Parents Advisory Group for the Internet: PAGI partners the Internet industry and government agencies to promote safe surfing and educate parents about online safety.

Internet Content Rating Association ICRA is a rating system designed to protect children from potentially harmful content. It is backed by the biggest names online.
Content Management Tools Various tools have been developed to help empower audiences. For example, TV ratings help parents identify inappropriate programmes according to a child's age or unsuitability due to sex, violence or adult language. The V-Chip can help parents "screen out" the programs with TV ratings they don't want their children to watch. The V-Chip is already built into new TV sets -- parents who want to use it just have to turn it on when they set up their new TV.

CHAPTER FIVE:
A NATIONAL COLLABORATIVE STRATEGY

WORKING TOGETHER TO TRANSLATE VISION INTO ACTION

Currently, the creative cluster in Singapore has not been recognised as an area deserving of a national policy strategy and state investment. While MITA and her agencies, together with EDB, STB, IE Singapore and MOE have served to develop the arts and culture in Singapore over the years, policymaking, developmental and promotional programmes are frequently conducted on a fragmented basis.

To develop Singapore's creative cluster, a national concerted approach must be adopted to involve all players with vested interests. MITA could be tasked to spearhead the co-ordination and development of the creative cluster, whilst garnering support from other government agencies in a Singapore Inc. manner. Besides MITA and players in the creative sector, the following partners should be involved:

- Ministries and statutory boards involved in tourism, education, manpower planning and development, economic development, trade, transportation, urban development, housing, finance, law, community development etc (i.e. STB, MOE, MOM, MTI, EDB, IE Singapore, SPRING, JTC, LTA, MND, URA, HDB, MOF, Minlaw, MCDS)
- Educational institutes at all levels
- Technology companies which see in the creative sector opportunities for new product development and markets
- Businesses from outside the creative sector that employ creative workers, hire creative services or enjoy the benefits of a rich cultural scene for recruitment and retention purposes (i.e. Singapore Business Federation as key partner)
- Financial institutions and investors (including venture capitalists) who recognise the unique financing needs and opportunities within the creative sector
- People Sector, such as People's Association, Community Development Councils, Non-Government Organisations, volunteer bodies and individuals, associations such as clans and expatriate bodies, etc

The national strategy will aim to achieve the following objectives:

- Raise awareness of the economic potential of the creative cluster
- Foster creative partnerships and collaborative strategies with the public, private and people sectors to promote the growth of the creative cluster
- Define and measure the economic impact of the creative cluster in Singapore, with benchmarking studies against other global creative hubs

> **Understanding the Creative Economy**
> Specific research initiatives could include:
> - Identify and track economic indicators of the Creative Economy, such as employment trends, economic value-add, exports, etc
> - Create a Creative Economy Index to benchmark against other countries
> - Generate issue papers on gaps and challenges impacting the development of the Creative Economy
> - Organise research conferences and forums

- Research on the key issues and challenges intersecting with the growth of creative industries
- Formulate and promote policies and programmes that will further the interests of a creative cluster
- Proxy for Government investment in the necessary resources required to nurture a creative cluster, such as funding, talent and infrastructure
- Promote dialogue and exchange among industry players within and beyond Singapore
- Facilitate collaborative exchange with government agencies / NGOs engaged in similar research and investment throughout the world

The National Collaborative Strategy has already been set into motion. For the past 8 months, MITA and its statutory boards have initiated a series of feedback sessions study missions and international advisory programmes to seek the advice of international experts and gather feedback from stakeholders. A listing of these platforms is provided at *Annex 1.3*. Since March 2002, EDB has also initiated a series of brainstorming sessions with agencies such as MITA, IDA, IE Singapore, NAC, SBA, STB and Singapore Sports Council (SSC) to discuss how a holistic approach could be adopted to align the various agencies' efforts in developing the arts, culture, entertainment and sports industries. We will continue to build on these efforts to bring the creative cluster movement to new heights.

CONCLUSION

This Creative Industries Development Strategy report presents a blueprint for Singapore to define its new competitive edge as we transit into the innovation-led economy. Moving beyond the traditional manufacturing and services industries, we need to identify new areas which are innovation-driven and offer excellent growth prospects and economic spinoffs. The creative cluster not only fits these criteria but can potentially change the whole texture of our economy by advocating the fusion of arts, business and technology, and inspiring creativity and innovation across all sectors of the economy – hence propelling the growth of the Creative Economy.

We must recognise that the successes of many international cultural hubs are supported by deep cultural capital and a high level of creative energy and passion residing within their people. Creative education and training are therefore the fundamental investments we must be prepared to put in before we can expect to see results. At the same time, we must catalyse a thorough transformation of our creative landscape to enable these creative people to flourish and to reap economic benefits from their works. This would require a total systems approach leveraging on the concerted efforts of our public, private and people sectors. The returns on investment may not be immediately visible nor measurable in the short term but when the Creative Economy does eventually take flight, our rewards will be immense.

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A New Agenda for a Creative and Connected **Nation**

INVESTING IN SINGAPORE'S CULTURAL CAPITAL

March 2002

CONTENTS

EXECUTIVE SUMMARY

1.   Singapore has achieved much in its past four decades of economic growth. We have become a dynamic, prosperous and modern nation based on strong fundamentals and through harnessing the collective energy of our people. The driving force in the next phase of our development will be our imaginative and creative capacity. To succeed in this new innovation-led economy, it is crucial that we foster these key traits in our individuals to fuel new value creation, increase productivity and maximise the growth opportunities arising from emerging industries such as the creative cluster.

2.   It is through sustainable and strong investment in our cultural capital that we will evolve a **Creative and Connected Singapore**. This is our vision of a "remade" Singapore – driven by a creative economy – that will thrive in the next phase of development and growth.   **Our cultural capital is the accumulated sum of our nation's creative capacity and our emotional and social bonds to the country and communities, and our deep knowledge of economy, society and world affairs.** In a New Economy where ideas, creativity, entrepreneurship, technology and knowledge converge and connect, cultural capital shapes the content, the tools and the environment with, and in, which people create new value and form new industries.   Cultural capital is therefore the driving force and the measure of a society's ingenuity and creativity. It is also an important support for building an environment that fosters multi-disciplinary learning and innovation among the workforce, and helps bind together communities and the nation.

3.   The economic and social contributions of cultural capital are already well recognised in global cultural nodes such as UK and US. In US, the creative cluster which includes core copyright industries and non-profit cultural industries, generates more than US$480 billion in annual revenues, accounting for over 5% of GDP. The value added to GDP of the core copyright industries between the years 1977 and 1999 increased by 360% and export revenue for 1999 is estimated to be at least US$79.7 billion. If we include the other related industries such as retail trade and computer manufacturing, the contribution to GDP of the "total" copyright industries which create, distribute or depend on copyright works in 1999 is about 7.3%. This figure excludes the spin-offs from the tourism, entertainment and lifestyle industries and this shows that the total contribution of the creative cluster to GDP has potential to be much higher than is currently known.

4.   In the UK, the creative industries generate revenues of around £112.5 billion and account for over 5% of GDP. Exports contribute to around £10.3 billion and this industry employed some 1.3 million people. Once again, this figure has excluded the contributions from the distribution, tourism and retail industries, hence showing that the "true" contribution to GDP of this industry, is potentially much higher. In both countries, the growth of the creative cluster outstrips that of the overall economy. In fact, this cluster is increasingly being recognised as a potential export engine for both economies due to the presence of lesser international regulatory structures and legislation, as compared to other services sectors such as banking and legal services. From the social perspective, cultural capital is seen by these countries as a tool of civic engagement to bond communities and help them adapt to change, and a source of inspiration, individual fulfilment, identity and useful beauty.

Creative Cluster… Creative People, Creative Workforce…Connected Nation

5.   This paper discusses three key interlocking themes of a Creative and Connected Singapore. Firstly, our "**Creative Cluster**" which includes individuals and enterprises engaged in traditional arts (such as performing, literary and visual arts, etc) and "applied arts" industries (such as advertising, design and publishing, media etc), is a potential growth engine for our economy. This cluster currently lacks a co-ordinated national strategy and hence, the opportunities presented by cultural entrepreneurship are not fully exploited. In addition, the convergence of arts, technology and business has led to the emergence of many "augmented" products – Banyan Tree Resorts, "New Asia" culture, iMac etc – and new industries – new media, interior landscape, graphic design etc – all of which have the potential to generate new wealth for our nation. It is imperative that we tap on the creative cluster as a pillar of our services sector to fuel Singapore's next phase of development.

6.   The imaginative capacity of our "**Creative People and Creative Workforce**" is another key component of our cultural capital. Studies have shown that investing in our cultural capital will unleash the creativity of our people, enabling them to be creative in ways that involve, but also go beyond, the arts. Our people will become unafraid to discover, take risks and experiment in an environment which encourages multi–disciplinary learning. This will in turn fuel new growth and value creation. At the same time, we have to acknowledge that the arts and culture are an important source of inspiration and a powerful avenue for individual expression as well as a means to nurture a well-balanced society. To unlock this creative capacity in our workforce and our people, we believe that a paradigm shift in thinking is needed to increase access, education and training opportunities to arts and culture.

7.   Lastly, economic viability has to be supported by a resilient and attractive society – a "**Connected Nation**". We believe that cultural capital has a key role to play in connecting Singapore at home and abroad, and to the past, present and future. Connections can be tangible, through developing technological linkages and knowledge arbitrage infrastructure; or intangible, through strengthening emotional and social bonds of our people to the nation and the community. Through these connections, we want to develop a compelling ecosystem for global talent to live in. In addition, our cultural capital is a key instrument in forging stronger relationships and goodwill with other countries. In today's global village, this not only enhances our image and branding, but also helps to sharpen our competitive edge.

8.   This is why a paradigm shift in assessing the importance of our cultural capital is essential. In this new economic environment, how we invest in and deploy our cultural capital will have profound impact on both the economic competitiveness and social well being of our nation.

Summary of Recommendations

9.   The broad goals and recommendations to evolve a Creative and Connected Singapore are outlined below:

(I)   A National Collaborative Strategy

- Adopt a **national partnership approach** to invest in cultural capital in Singapore, involving players such as ministries and statutory boards, educational institutes at all levels, technology companies, businesses, financial institutions and investors, people sector etc. MITA can be tasked to co-ordinate and spearhead our new cultural policies for the New Economy, and garner support from the other agencies in a total Singapore Inc. approach.

(II)   Develop the Creative Cluster

- Embark on a **Design Singapore** initiative to capitalise on opportunities arising from "applied arts", to further develop the economies of this promising sector, which includes fashion, multi-media, graphics, industrial design, advertising, communications
- Formulate a **Media 21** blueprint to exploit the new media opportunities created by the convergence of content and delivery technologies.

(III)   Nurture a Creative People, Creative Workforce

- Enhance the existing **Arts Education** programme through close collaboration between MITA, MOE, MOM and educational institutions at all levels, to develop future audiences, creative workers, volunteers and donors
- Embark on an **Arts Everywhere** initiative to make arts, culture and heritage more accessible and available to Singaporeans at all rungs of the society

(IV)   Build a Connected Nation

- Embark on a **Knowledge Singapore** initiative to enhance the role of libraries and archives in catalysing the development of the information services sector in Singapore
- Evolve a **Connected Island** with the most advanced infocomm facilities in all sectors of the economy
- Enhance our **Marketing Singapore Strategy** to deepen emotional and social ties within our people, as well as with the global community

(V)   A New Funding Philosophy for the Nation

- Strong and sustainable funding from the government to develop our cultural capital through:
  (i)   a more substantial **percentage of GDP** funding;
  (ii)   **collaborative partnerships** amongst government agencies to include co-funding mechanisms; and
  (iii)   a **Creative Singapore Development Scheme** as a dedicated funding framework to develop the creative economy and society
- Enhance **corporate and private philanthropy**

> *I was educated, entertained, enthralled, moved, challenged, intimidated, humbled and most of all inspired.*
>
> – Jeffrey Katzenberg
> Partner, Dreamworks SKG

I. INTRODUCTION

New Agenda for a Creative and Connected Nation

The global economy has changed dramatically. Today, the new architects of the global economic landscape are those who are able to harness the intangibles, such as ideas, knowledge and expertise, to add and create new value. More than ever, people are at the heart of a nation's competitiveness: a people who possess the knowledge and skills, but more importantly, a creative people who, aided by their knowledge and skills, are able to generate and realise new ideas beyond those of the present. Against this new global landscape, Singapore has rightly embarked on a journey of reinvention. It is a journey which will inevitably lead us to consider the sum of our nation's creativity, ingenuity and imagination as the key driving force of our next phase of development.

2.   Singapore has achieved much in its past four decades of economic growth. We have become a dynamic and prosperous nation based on strong fundamentals and drawing on the collective energy of our people. As we reinvent ourselves, we can build on this foundation to make the rapid transition from an investment and manufacturing-led economy to an innovative one. But more than that, a new Singapore will need to be a nation brimming with creative energy, passion and excitement, a nation of new opportunities and possibilities. We will need to foster a confident, imaginative and resilient citizenry, and create an environment where Singaporeans are unafraid to explore, discover, take risks and invent. This is the vision of a **Creative and Connected Singapore.**

3.   Cultural capital is central to realising this vision. A nation's cultural capital is the accumulated sum of her creative capacity, the people's emotional and social bonds to the country and community, as well as the deep knowledge of economy, society and world affairs. In the spirit of remaking Singapore into a creative and connected nation, we need a new agenda to invest in and deploy our cultural capital for our economic competitiveness and social well-being.

4.   However, we have, as yet, no existing documentation and measure of Singapore's cultural capital. This report is by no means an exhaustive study of our cultural capital. Instead, this report aims to serve as a catalyst to spur a deeper understanding of and a more active engagement and investment in our cultural capital. Drawing on the experiences of the creative cities of today, this report will first

explain why a new paradigm in investing in our cultural capital is critical in shaping our nation's new competitive advantage. We will then propose broad strategies for a more integrated approach to developing and harnessing Singapore's cultural capital. Lastly, in putting forth a new investment case in our cultural capital, the report will argue for a new funding philosophy.

> *A nation's cultural capital is the accumulation and sum of her creative capacity, the people's emotional and social bonds to the country and community, as well as a deep knowledge of the world – its histories, economies, philosophies, societies and arts.*

II. DEFINING TERMS

5.   **Cultural capital** is a critical strategic national resource. In the New Economy where ideas, creativity, entrepreneurship, technology and knowledge converge and connect, cultural capital shapes the content, the tools and the environment with and in which people create new value and form new industries. Cultural Capital is therefore the driving force and the measure of a society's ingenuity and creativity. It is also an important support for building an environment that fosters multi-disciplinary learning and innovation among the workforce, and helps bind together communities and the nation. Understood as such, cultural capital is therefore at the heart of our new vision of a Creative and Connected Singapore. But to be able to harness it for our future competitiveness, we will first need to define and capture the value of Singapore's cultural capital.

6.   This report lays out three key components of our cultural capital for a Creative and Connected Singapore. The three components encompass both the arts and culture sector, as we know it today, and also beyond. They are defined as:

Creative Cluster

- Defined as enterprises and individuals that directly and indirectly produce cultural products. This has the potential to become one of the key engines of growth for the economy.

- The cluster includes artists, as well as public and non-profit organisations such as libraries, the performing arts, museums and heritage sites, festivals, the visual and literary arts.

- The cluster also includes commercial activities and businesses in industries such as advertising, architecture, graphic and industrial design, crafts, film and media, music, the performing arts, galleries and auctions, photographic studios, publishing, television and radio, and commercial theatre.

- The cluster is supported also by education institutions, especially those in higher and specialised education, cultural agencies and philanthropy.

Creative People, Creative Workforce

- Defined as individuals who have "cultural capital inside". These are people who have a deep consciousness of the importance of culture and creativity and deploy it to their full advantage in the New Economy.

- Creative Workforce includes producers who are workers or entrepreneurs in the creative economy with specific cultural and artistic skills and drive leading industries, though not limited to the arts and culture.

- Creative People includes consumers who fuel the demand for cultural activities and differentiated products and services, as well as individuals who are inspired by the arts but are creative in ways that go beyond the arts.

Connected Nation

- Defined as a nation which has the ability to connect to others, both at home and abroad, and to the past, present and future.

- These modes of connection associated with cultural capital include the tangible and intangible; the social and emotional ties to the community and nation, as well as technological linkages and knowledge arbitrage and infrastructure.
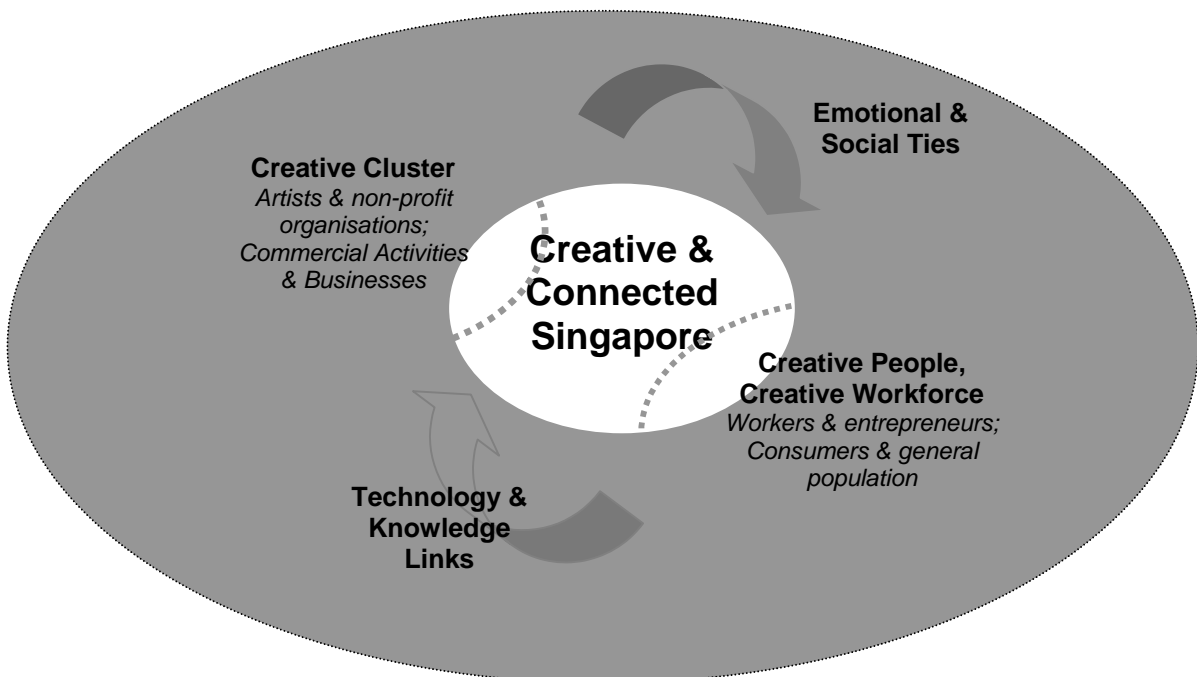
Cultural Capital in Action

Imagine a cultural outing in Singapore –

A local performance group that has achieved worldwide accolades has returned to Singapore to give a performance. Their signature style is a unique fusion of dance, opera and interactive media, drawing on Eastern and Western influences….

The director of this group began to immerse herself in the arts while she was a student in primary school. Inspired by the visiting artists under the school's "Artists-in-Schools Creative Partnership" programme, she then continued her studies in a prestigious arts university. Upon her graduation, she was appointed onto the faculty of the Institute of the Arts at a local university, where she was given the space and freedom for artistic experimentation. The Institute of Arts is located within a prototype creative community where artists and creative workers work, live and interact freely. After a few years with the Institute, the artist was awarded a grant co-funded by the government and a private corporation to advance her career overseas. Her rise as a successful international artist and director of her own performance group is a deep source of pride for all Singaporeans. After several successful years overseas, this artist is back in Singapore with her group.

The group performed to a sell-out audience of 5,000 inside the most modern and technologically advanced concert hall in Singapore. This hall was made possible with creative funding support from local corporations, individual donors, and government agencies. One of the key players in the flourishing local digital media and entertainment industry has offered to supply web-cast technology. Sound, lighting, special stage effects, IT and video technicians were busy with last-minute preparations for the concert and simultaneous world-wide web-cast.

Throughout the night, the multi-racial audience was engaged in a performance that provided inspiration, enjoyment and sensory stimulation. Among the audience were several groups of people who were bound by their common interests in the arts and culture. Coming from all walks of life, they regularly met – either physically or virtually – to discuss the latest happenings and developments in the arts and music scene. They had arranged for group bookings to enjoy the better ticket rates. Amongst them were also cultural tourists from the Asian region who were fans of the artist and have booked online a 2-day stay in Singapore just so that they could catch the concert. All were satisfied with the fine meals they had just consumed at the restaurants in the arts centre, and with the souvenirs they bought from the centre's souvenir shop. Young parents in the audience were secure in the knowledge that their children are safe at the babysitting facility in the centre. They were all looking forward to a perfect ending for an enjoyable night where they have already spent far more on ancillary services than on the concert tickets themselves.

The concert was finally so successful that the digital video recording was packaged for sale, marketed and promoted by local businesses for international sales. There were plans to set up an interactive web site to host the highlights of this concert. International media present at the concert had given the performance excellent reviews and the digital video looked set to break all sales record. The artist was overjoyed by the reception to her group's work and decided to give free copies of the digital video to all schools to support their arts education program. She wanted to contribute to a key process which had played a critical role in shaping her life.

This is a snapshot of a Creative and Connected Singapore, a nation whose economic development is fuelled by her innovative capacity and creative impulses. This is a nation of people who hold deep emotional and social bonds to the country and community, but are at the same time connected to the world. A seemingly simple concert given by an individual artist relies on a vast international network of support from educational institutions, government, private investors, non-profit organizations and technological enablers. From the restaurant to the babysitter, the primary school teacher to the university faculty member, the technician to the digital media company, the artist to the global audience, all of these players contribute to, participate and benefit from a Creative and Connected Singapore in both the economic and social aspects.

7.   The above illustration presents an exciting albeit bewildering picture of immense possibilities for the individual and a range of industries and activities in a Creative and

Connected nation. In order to comprehend the precise impact of investing in our cultural capital and the role of each the three components, we need to first assess and consider where we stand today. Only then will we be able to fully grasp the paradigm shift required in working towards the vision of a Creative and Connected Singapore.

III. CULTURAL CAPITAL – WHERE WE ARE TODAY

Historical Milestones

8.   The **1989 Report on Advisory Council on Culture and the Arts** (ACCA), chaired by the late former President Mr Ong Teng Cheong then Deputy Prime Minister), is widely regarded as a watershed in the development of our arts and culture scene. The Report paved the way for the formation of statutory boards such as the National Arts Council (NAC), National Heritage Board (NHB), National Library Board (NLB). It also initiated the development of infrastructure such as the Singapore Arts Museum (SAM), the Asian Civilizations Museum (ACM) and The Esplanade – Theatres on the Bay. More importantly, the report served to catalyze the growth of our local arts and culture scene.

9.   While the 1989 ACCA Report focused on developing "hardware" for culture and the arts, subsequent committees turned their attention to nurturing the "software" and "heartware" of the nation. In **December 1996 the Committee on National Arts Education**, headed by Dr Soh Kay Cheng, proposed a coherent national arts education policy to develop the necessary creative competencies for Singapore in their report entitled "The Next Wave of Creative Energy". This was followed by **a report by the Committee to Upgrade LASALLE-SIA and NAFA in July 1998** which legitimised arts manpower development at the tertiary level.

10.   Headed by Dr Tan Chin Nam, the Committee's report was titled "Creative Singapore – A Renaissance Nation in the Knowledge Age". It made recommendations to upgrade LASALLE-SIA and Nanyang Academy of Fine Arts (NAFA) into internationally renowned tertiary-level centres of artistic excellence with polytechnic level funding by the Government. It also proposed the establishment of an Institute of the Arts (ITA) at the National University of Singapore (NUS), which will conduct degree courses in the performing arts. Singapore's first Conservatory of Music, offering degree programmes for music, will be opened in 2003. These recommendations were made with the objective that the various institutes could further contribute to the development of the arts in Singapore, enhance the competitiveness of our economy and extend the range of career options available to Singaporeans.

11.   More recently, the Government endorsed the **Renaissance City Report in March 2000** by MITA. The Renaissance City Report had two main aims: to establish Singapore as a global arts city and to provide cultural ballast in our nation-building efforts. Six specific thrusts ranging from developing a strong arts and cultural base, recognising and grooming local talent to developing an arts and cultural "renaissance" economy were proposed. An additional $50 mil in funding was allocated to MITA to implement the new proposed programmes and initiatives outlined in the report.

Roles of Multi-Agencies in Arts and Culture Development

MITA & her agencies

12.   MITA and her agencies, as proposed in the 1989 ACCA report, have been spearheading the development of Singapore's arts, culture and heritage sector. Apart from expanding the national base of knowledge and cultural capacity, MITA plays a pivotal role in the nurture and development of local artists, the provision of cultural infrastructure, and the development and regulation of information services. With the latest inclusion of the Info-communications Technology (ICT) function last year, MITA's range of functions has further grown to encompass a broader representation of the entire value chain of cultural capital development. This ranges from the creators, promoters and repositories of cultural content (NAC, NHB, NLB) to ensuring affordable and available access for all by developing the enablers of content transformation and dissemination (Singapore Broadcasting Authority/SBA and Info-com Development Authority/IDA). MITA is now better positioned to exploit the full economic potential of the convergence of creative content, IT, telecommunications and broadcasting technologies.

13.   However, MITA and her agencies have traditionally approached the development of the arts, culture and heritage sector from a non-profit angle. While the inclusion of ICT provides an updated and a more comprehensive understanding of the full spectrum of cultural activities as having both economic and aesthetic-social value, the profit element of these activities was and is currently the purview of other government agencies.

"Arts for Business' Sake": EDB, STB & IE Singapore

14.   Specifically, the function of developing the "creative cluster" which includes art galleries, auction houses and impresarios was first situated in the Economic Development Board (EDB)[1]. It was subsequently transferred to the Singapore Tourism Board (STB) in 1995. Today, STB sees itself as developing "arts for business' sake" with the key aim of promoting arts and cultural tourism. STB has been keenly involved in the industry development of the cultural cluster, such as art galleries, auction houses and impresarios over the past few years to ensure a quality pipeline of arts products and services. In addition, STB is also active in the international marketing of Singapore as an arts destination and regional arts hub for events and business.

15.   Although EDB is no longer responsible for promoting the creative cluster, it has recently identified cultural capital as one of the 4 key pillars crucial to the development of a diverse, vibrant and self-sustaining enterprise ecosystem. This was clearly stated in DPM Tony Tan's Speech at the Economic Society Dinner in Aug 2001. In addition, EDB plays the role of promoting the Media and Digital Entertainment (MDE) cluster, which includes broadcasting and production, animation, specialist information and publishing, consumer electronics, and games development. EDB actively promotes companies in this cluster as well as the supporting industries through partnership, facilitation and dialogue with industry. EDB, together with STB and the Singapore Film Commission, have also supported the local film industry all these years.

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[1] A Creative Services Strategic Business Unit was set up in EDB in 1990. Its main task was to formulate a blueprint on how creative services can enhance the quality of life and the economy. 19 taskforces brainstormed on separate sectors from design to performing and visual arts. In addition, EDB also recommended the formation of institutes to nurture creative skills, and this recommendation resulted in the formation of Ngee Ann Polytechnic's School of Film and Media Studies and funding support from SIA to LASALLE College of the Arts.

EDB next proceeded to develop performing and visual arts into a business. This creative services development function was transferred to STB in 1995 to launch the arts business cluster into the third stage – developing cultural tourism and gleaning economic spin-offs from the arts businesses while further expanding the industry cluster.

16.   International Enterprise Singapore (IE Singapore, formerly Trade Development Board/TDB) used to be involved in promoting the design industry through establishing a Design Council and a Design Centre to facilitate the growth of design services, establish international links and assist the industry to improve their product and packaging design. Although the Design Council has been dissolved and the Centre closed down subsequently, IE Singapore still plays a role in promoting the application end of the design value chain. This provides a strong basis for collaboration with MITA/NAC so that a holistic approach can be taken to develop the entire value chain of the design industry.

Arts Education and Outreach: MOE

17.   In the area of arts education and outreach, MOE is the key player. Today, music and the visual arts are taught in all Primary and Secondary schools. Several Secondary schools and Junior Colleges also offer both Music and Art Elective programmes. In addition, through NAC's Art Education Programme, schools can link up with local arts groups to increase the artistic and cultural capacity of students. MOE further oversees the tertiary arts institutions, such as LASALLE-SIA, NAFA and the soon to be opened Conservatory of Music at NUS.

Moving Ahead

18.   While MITA and her agencies, together with EDB, STB, IE Singapore and MOE have served to develop the arts and culture in Singapore over the years, we need a more coherent and co-ordinated approach in developing Singapore's cultural capital. Currently, policymaking, development and promotional programmes are conducted on a fragmented basis, with little co-ordination between the development of the economic as well as the cultural and aesthetic aspects. The dichotomy between "art for art's sake" and "art for business' sake" needs deeper examination. The current arrangement also lacks sufficient co-ordination between arts education in schools and the overall cultivation of cultural literacy to grow a critical audience and to tap into the creativity of our people and workforce.

19.   Cultural capital, as the next section will discuss and argue, cuts across a wide spectrum of cultural, artistic and commercial activities, and results in a range of both intangible and tangible benefits critical to the nation's continual growth. However, the lines between these activities and the contributions of cultural capital are not always distinct. Developing our cultural capital will therefore demand a re-examination of the roles and responsibilities of the relevant agencies, and a new approach to the arts and culture.

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IV. CULTURAL CAPITAL AS A CRITICAL NATIONAL RESOURCE

20.   The previous section sketched Singapore's efforts and approach in developing her arts and culture thus far. It also suggested that a new approach to the arts and culture is needed to grow Singapore's cultural capital. As defined in Section II, this report has identified cultural capital as three interlocking components – Creative Cluster; Creative People and Workforce; and Connected Nation. This section will therefore discuss in greater detail the role and contributions of each component, as evidenced in other countries or existing case studies. It will highlight the many ways in which cultural capital can serve as a critical resource for Singapore to evolve a creative economy and connected society.

**The Creative Cluster
– New Growth Engine for the Economy**

There's a false dichotomy between art for art's sake, and its economic and social impact.

– Gerry Robinson
Chairman, Arts Council of England

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21.   The economic importance of cultural capital is already well recognised and documented in both USA and the United Kingdom (country case studies with relevant statistical evidences and graphs are at Annex 1.1.1 & 1.1.2 respectively). In fact, since the 1990s, the USA and UK have started to map out co-ordinated strategies at both the national and regional levels to tap the full economic potential of the creative and cultural sector. More importantly, these countries have consciously sought to understand the sweep of artistic and cultural activities in an attempt to further their contributions to the economy, whether directly or indirectly. As a result, the arts and culture, while retaining their significance in the aesthetic and cultural spheres, are no longer conceived as only as philanthropic or luxurious activities, but as an important factor in the wealth and prosperity of the nation.

22.   The economic figures for the creative clusters[2] in both countries are compelling. In USA, the core copyright industries[3], which include film, video, music, publishing and software, generated an estimated US$450 billion in revenues and accounted for **5% of America's GDP**[4] in 1999. Between 1977 and 1999, the **value added to GDP** by the core copyright industries increased by **360%**. Foreign sales and exports of these

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[2] The creative cluster is a unique entity which defies the traditional definition of a cohesive or discrete industrial sector. Rather, the creative cluster is made up of multiple economic sectors which are unified by the common thread of cultural creativity. Enterprises and individuals engaged in the fields of advertising, digital media, design, fashion design and architecture, are examples of the components of this cluster.

[3] The core copyright industries encompass those industries that create copyrighted works as their primary products. These industries include the motion picture industry (Television, theatrical and home video), the recording industry (records, tapes and CDs), the music publishing industry, the book, journal and newspaper publishing industry, the computer software industry (including data processing, business applications and interactive entertainment software on all platforms), legitimate theatre, advertising, and the radio, television and cable broadcasting industries.

[4] Study on US Copyright industries by Economists Incorporated (Washington D. C: International Intellectual Property Alliance. 2000)

copyright industries have continued to grow rapidly over the years. Preliminary estimates conservatively measure **foreign sales** of the US copyright industries to be at least **US$ 80 billion** in 1999.

23.   If we look at statistics for the total copyright industries, which comprise the core copyright industries and portions of other industries which create, distribute or depend on copyrighted goods (such as retail trade and toy industry), they contributed an estimated US$678 billion to the US economy, accounting for more than **7% of GDP** in 1999. On top of this, the non-profit arts and culture sector generates some US$36.8 billion in annual revenue[5]. This is excluding the spinoffs from the tourism, entertainment and lifestyle industries. This shows that the total economic contribution of the creative cluster has potential to be much higher than what is currently known. Nationwide, an estimated 7.6 million people now work in US's creative cluster, accounting for nearly **6% of the workforce**. Their numbers are growing at a rate that has far outpaced job growth in many other economic sectors[6]. For example, the projected employment growth rate in the creative cluster in New England is 14% compared to all industries at 8%[7].

24.   In the UK, the creative industries have been defined as "those industries which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property". These industries include advertising, architecture, the art and antiques market, crafts, design, designer fashion, film and video, interactive leisure software, music, the performing arts, publishing, software and computer services, television and radio. Although the terminology of the UK's definition is different from the US, the emphasis on intellectual property in this definition brings it close to the concept of 'copyright industries' as adopted by the US.

25.   In the UK the creative industries generate revenues of around £112.5 billion and employ some **1.3 million people**. Exports contribute around £10.3 billion to the balance of trade, and the industries account for **over 5% of UK's GDP**. In 1997 – 98, output in these industries grew by 16%, compared to under 6% for the economy as a whole[8]. Once again, this figure has excluded the contributions from the distribution, tourism and retail industries, hence showing that the "true" contribution to GDP of this industry, is potentially much higher. In fact, so compelling are these statistics that the British government has commissioned a study to forecast a series of projections of likely future trends in the creative industries up till year 2010. This report is due to be released later this year.

26.   Apart from direct economic contributions, a vibrant arts and cultural scene generates economic spin-offs in other sectors, such as the tourist and arts-supporting industries. For example in New England, USA, the creative economy generated **US$6.6 billion** in cultural tourism dollars in 1998[3]. In the same year, a multiplier study done to analyse the economic contribution of Singapore's arts tourism industry gave a multiplier of 1.8. This means that for every dollar spent on cultural activities, another $1.8 was spent on related activities such as food and hospitality. There is great potential for this figure to increase dramatically, especially if more resources are invested in further supporting our arts and culture scene. In addition, the arts-supporting industries, such as

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[5] The Role of the Arts in Economic Development (Washington D.C.: Issue brief by NGA Center for Best Practices, June 2001).
[6] America's Cultural Capital: Art, Culture & the National Agenda (Washington D.C.: Center for Arts and Culture, March 2001).
[7] The Creative Economy Initiative: The Role of the Arts and Culture in New England's Economic Competitiveness (Massachusetts: The New England Council, June 2000).
[8] Creative Industries Mapping Document (London: UK Creative Industries Task force, 2001).

stage management, impresarios, auction houses and technical management companies, amongst others, have significant growth potential.

27.   These statistics are further supported by economic analysis that shows that the arts and culture are an attractive public investment for states, communities and countries: the yields are high, the risks low and opportunities sizable. Strategic investors, who focus on the long-term outlook for an investment, will be impressed by the way that arts institutions can create jobs and serve as the core of economic as well as community or neighbourhood revitalisation plans. Tactical investors, who are primarily interested in short-term cash returns, will be impressed by the tax income generated from arts-related spending[9].

28.   The Guggenheim Museum Bilbao is a prime example of how the arts and culture was at the core of the economic revitalisation plans of the Basque government to revitalise their County's recession plagued economic structure. Up till today, the Basque government and their people view the Guggenheim Museum as a good investment.

Case #1: The Guggenheim Museum Bilbao and the Revitalisation of Basque County, Spain

The Guggenhiem Museum Bilbao cost a total of 132.94 million Euros (83.5 million pounds, USD 123.5 million). This investment was paid for entirely by the Basque County. Since the museum opened in October 1997, more than 2.625 million people have visited it. In the first year alone, there were 1.36 million visitors and in the second period from 19 October 1998 to 31 December 1999, 1.265 million people visited the Guggenheim. Of these visitors, surveys show that 79% in the first year and 89% in the second came to Bilbao specifically to visit the museum and, or having come for other purposes, prolonged their stay to visit the museum. The total sum[1] that was spent by these visitors over these two years amounted to about 433 million Euros (274 million pounds, US$ 403 million).

Moreover, the opening of this museum created 8,899 jobs for the Basque Country over these two years. This increment has produced additional income to the Basque Public Authority of about 63 million Euros from VAT, company taxes and personal income tax. To sum it up, the increase in GDP for the first year, 144 million Euros (or 108% of initial investment) shows that the Basque authority has recouped its investment solely from the first year alone. This, together with the external spin-offs demonstrates the success of the Guggenheim in rejuvenating the economically depressed Basque Country. This example clearly shows that the arts and culture can contribute significantly to the economic growth of our country and to our attractiveness as a tourist destination.

(Source: Art Newspaper, 2001)

[1] Tourist dollars were spent mainly on restaurants, bars, commercial outlets, hotels, transport and museum merchandise.

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[9] Arts for more than art's sake (Connecticut: McKinsey & Company, 2001).

29.   These examples and statistics serve as evidence that the creative cluster can be a significant force in driving economic growth. Worldwide, as the demand for cultural and creative goods and services grows, and technology opens up new opportunities in the global marketplace for reaching new audiences and customers, we observe a growing trend amongst governments, academics and think tanks to re-define the link between the creative sector and economic competitiveness. Besides the US and UK, the European Commission had also in recent years concluded that creative activities play in their economies. Countries like Australia and Canada have reached the similar conclusion that the creative cluster is an area worthy of sustainable support and promotion.

Singapore's New Services Paradigm

*Our vision for the services sector is to build Singapore into the premier services hub in Asia with a global orientation… With a **services paradigm**, less tangible factors like creative and innovative ideas and professional skills should be given greater weight.*

(Source: Committee on Singapore's Competitiveness, 1998)

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30.   **To maximise the growth opportunities arising from this sector, we feel that it is now opportune for us to invest in our cultural capital to develop the creative cluster as a key driver of Singapore's economy.** This is in perfect alignment with the vision spelt out by the Committee on Singapore's Competitiveness in 1998 to capitalise on the services sector as a new growth engine for our economy. Furthermore, the global sales statistics from both the UK and US provides clear evidence of the exportable nature of the creative industries.   Unlike other services clusters such as that of healthcare, banking and legal services, the creative industries are "easier" to export because they face less restrictions by international regulations and structures. Therefore Singapore should leverage on this cluster as a means to tap on global markets (see boxed text on "New Asia" Cultural Exports on page 17).

31.   Currently, the creative cluster in Singapore has not been recognised as an area deserving of a national policy strategy and state investment. The economic figures bear evidence to that: in 1998, the economic impact of the arts (excluding the applied arts) was estimated at only 0.4% of Singapore's total GDP (roughly S$608 million) for both direct and indirect value-added of arts activities. This clearly shows that the economic potential of the creative cluster has not been clearly understood nor fully defined in Singapore. Moreover, with the increasing opportunities unleashed by globalisation and expanded markets, as well as the convergence of art, business and technology, we feel that it is time for an integrated and coherent policy to strategize and co-ordinate the development and promotion of emerging and promising creative industries.

Case #2: Current Perceived Economic Value of
Arts and Cultural Activities in Singapore

Without including the applied arts sector (eg. advertising, architecture, fashion etc), the arts and cultural activities in Singapore generated some S$1.1 billion in operating revenue and employed almost 7,300 people in 1998. These activities were classified into 3 sectors, namely: motion picture and video production and distribution; theatrical producers, entertainers and broadcasting services; and parks, gardens and cultural services.

(Source: Arts & Media in Singapore, 2000)

What is the Economic Value of "Applied Arts" Industries?

It is difficult to obtain economic statistics on the "applied arts" industries as they are often embedded within existing classification of industries. For example, the value of architecture is grouped together with "engineering and technical".

However it is notable that Singapore's advertising industry is listed as one of our top ten hub services (1986-1996). The value add of this industry was $370 million in 1996, and had a growth rate of 17.8% per annum.

(Source: Singapore Department of Statistics)

Case #3: Economic Potential of the "New Asia"
Experience and Lifestyle

The creative cluster, beyond the traditional arts and cultural activities, include also the entertainment, arts and lifestyle culture. The latter has been an especially powerful cultural force in the past century, enhanced tremendously by the impact of globalisation. In today's economy, the global impact of America's culture is irrefutable. Wherever you are, one need simply purchase a can of coke, walk past a local MacDonald's fastfood outlet, dine in a Hard Rock Café outlet or catch a Hollywood movie at a local cinema to experience some aspect of popular American culture/lifestyle in its many forms. In 1996, the U.S exported $60.2 billion in sales worth of software and entertainment products, and MacDonald's restaurants were opening at a rate of six a day around the world. This entertainment and experiential economic phenomenon is not only observed in the American popular culture, but also that of Japan, in what is commonly known as "J pop". Japan's cultural influence has extended its reach throughout the Asian continent, including Singapore, where our retail and entertainment scene demonstrates a very high visibility of Japanese fashion, food, TV serials and pop music.

Singapore, too, can create our own unique brand of 'New Asia' culture and hence contribute to the growth of our entertainment and experiential economy. Extrapolating from STB's branding of Singapore as a 'New Asia' tourist destination where East meets West, Asian heritage blends with modernity and sophistication, and old world charm combines with new world vision, we foresee a huge opportunity space for 'New Asia' culture to create new value and experiences, whether it is in lifestyle or entertainment products. In addition, the nature of creative services and products are such that they are easier to export as compared to legal and banking services, and hence it is critical that we fully exploit the unique positioning of Singapore to create and promote highly differentiated 'New Asia' products. Complementing the unique cultures of our neighbours, Singapore is in an ideal position to employ and export the 'New Asia' concept, and this helps to sharpen our competitive edge and fuel stronger economic growth.

There are many examples of what could comprise our 'New Asia' cultural exports, ranging from eateries (eg, Tamade and Coriander Leaf at Robertson Quay, and Siam Supper Club in Mohamed Sultan Road), architecture (eg, by Tan Hock Beng and Chan Soo Kian), fashion (Song + Kelly 21), music (eg composer Dick Lee, singers Kit Chan and Stephanie Sun, Singapore Symphony Orchestra), performing arts (eg The Necessary Stage, Singapore Dance Theatre, Action Theatre), etc. To help expand our 'New Asia' cultural export potential, we must first set up centres of excellence. An example is the soon-to-be-launched Singapore Tyler Print Institute, a collaboration with famed American

Song + Kelly 21

printmaker, Ken Tyler, to fuse Asian influences with the most advanced

Deep-fried tofu and cheese samosas

printmaking techniques.

Example of New Asia Export – Architectural design

*Architect Tan Hock Beng is a new-generation global entrepreneur. He left NUS in 1996 after he decided he had enough of academia, and started to receive commissions for small residences in Singapore almost immediately. Pictures and articles of some of these buildings were subsequently published in foreign magazines, which in turn helped to build his reputation as an exciting new architect with a unique brand of tropical architecture. Most of his designs will never be seen in Singapore. For MAPS Design Studio, Tan's architectural firm set up in 1996, **up to 70 per cent of the business has, so far, come from outside Singapore**.*

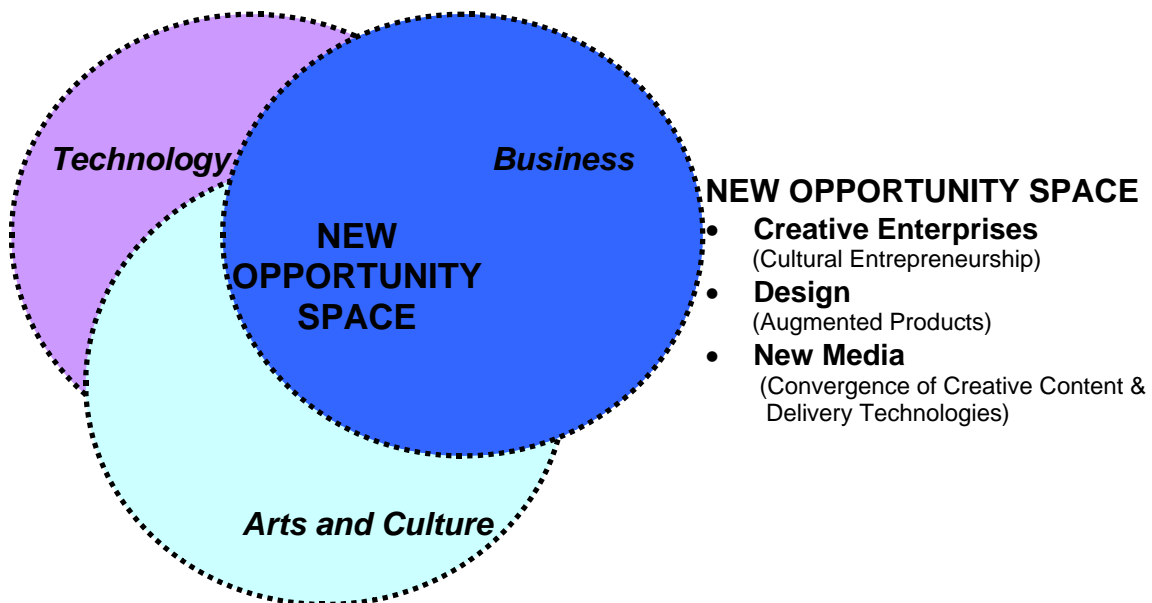*(Source: Straits Times, Life! 2 March 2002)*

> *To operate effectively in the world today, a business person is not boxed in by borders, not limited by languages. That is also a primary quality of art, and this is why partnerships between businesses and the arts work – both for the arts and for businesses.*
>
> – Donald M. Kendall
> Former Chairman & CEO, PepsiCo Inc.

**Creative Cluster
– New Opportunity Spaces**

32.   While the creative cluster as a whole can be a key engine of economic growth, it can also be understood as having critical impact on specific products and industries outside its immediate cluster of activities. The coming together of arts and culture with business and technology have often resulted in new growth opportunities across all sectors of the economy.   For example, the relationship between design and manufacturing industries have worked to create augmented products, while bringing elements of design closer to the general populace and providing important jobs for design workers and even artists. A strong emphasis on "design concept" will inspire product innovation and differentiation.

33.   Similarly, interdisciplinary learning fusing the arts with science and technology will help us to groom a new breed of inventors and designers, who are unafraid to look at things from new perspectives and to experiment and take risks.   Good design and cultural influence have been shown to add value to otherwise ordinary goods, thus creating new demand and expanding the market. This increases the intellectual property of our nation and contributes to a sharper economic advantage.

Technology   *Business*

NEW OPPORTUNITY SPACE

Arts and Culture

NEW OPPORTUNITY SPACE
- **Creative Enterprises**
  (Cultural Entrepreneurship)
- **Design**
  (Augmented Products)
- **New Media**
   (Convergence of Creative Content &
   Delivery Technologies)

Design & Augmented Products

34.   To illustrate this, we shall look at three cases of "augmented products" – Swatch watches, designer hotels, and the Apple iMac computer. In all three instances the creative and clever use of the opportunities arising from the convergence of arts with business and technology has resulted in new and differentiated products that have taken the world by storm and revolutionised their respective industries.

Augmented Products Case #1: Swatch

Swatch is an excellent example of how good design can create new market demand for a functional product. While Swatch does not command a price premium for its watches, the aesthetic appeal of Swatches is such that consumers are willing to purchase multiple versions of a product where one would suffice.

The Swatch project was started in the 1970s to combat the downturn in the Swiss watchmaking industry, faced with intense competition from Asian manufactured low-cost, good-quality quartz watches. A team was put together consisting of technicians, designers and marketing specialists to put together an innovative, integrated solution to distinguish the Swatch product from other watches. The Swatch success story in designing such a solution clearly illustrates how good design is good business.

Swatch is innovative on three different levels of design: technology, aesthetics, and marketing. Design has thus been central to Swatch's success in turning the watch from a functional necessity into a lifestyle accessory and collector's item. The quality of design has even enabled the Swatch to become a good investment, with some models fetching high prices at auctions and being exhibited in fine arts museums. In revolutionising the reason why people buy and wear watches, Swatch has in effect created a new market and economic value.

Augmented Products Case #2: Designer Hotels

Breaking away from the conformity and standardisation of chain hotels, the high-design revolution of the 1990s led to the birth of designer or hip hotels, where the biggest names in contemporary architecture, interior design and fashion inject individualism into these properties.

St Martin's Lane in London

Mondrian in Los Angeles

One success story is that of Ian Schrager, whose international group of seven hotels is estimated at US$1 billion. Schrager's properties enjoy an occupancy rate of 80-90% compared to an industry average of about 65%, and had a forecasted operating profit of US$120 mil in 2001[1]. One of the most well-known of his stable of hip hotels is the Mondrian in Los Angeles, which is one of several collaborations between Schrager and designer Philippe Starck. Starck (an art dealer, designer and stylist) is best known for elevating ordinary household goods eg. the citrus press and furniture to designer status through cutting-edge design. His innovations blur the line between objects of art and functional appliances.

Room rates at designer hotels in UK were also found to be typically more than half of their conventional four-star counterparts, and are aimed at the lucrative high-yield creative and media executive market[2]. A study found that increases in room demand for designer hotels rose to as high as 14% between 1995-2000 compared to only 4% for traditional upper-upscale hotels (eg. Westin, Ritz Carlton)[3].

[1] Source: "Where It's Chic to Sleep", TIME.com, 11 Jun 2001
[2] Source: UK Hotel Review, Knight Frank Research, 2000
[3] Source: "Boutiques and the Mainstream", Editor's Diary, Mar 2001.

Wedding suite at the Blake's. The hotel is a masterpiece of Anoushka Hempel, the internationally renowned designer of the connoisseur's hotel. A paragon of originality and luxury, the hotel reflects a distinct blend of East and West.

The luxury townhouse hotel at 22 Jermyn Street is the winner of multiple awards including the Cesar award and the Gault and Millau award for the best of London for 1999.

Zen-like simplicity at The Hempel's in London, another creation by Anoushka Hempel.

Augmented Products Case #3: Apple Computers' Second Generation iMac

Apple has reinvented the PC (again).

The company that made colorful computers commonplace is betting that people will now take to spherical systems and flat screens. On 7 January 2002, Apple unveiled the radically reinvented iMacs, which look more like desk accessories than their revolutionary predecessors. The new iMac is designed around a stunning 15-inch LCD flat screen that's brighter, sharper and easier on the eyes than old-fashioned CRT displays. Inside its ultra-compact base lives the fastest iMac ever, with a Pentium-crushing 800MHz G4 processor that blazes through the most demanding applications.

Apple CEO Steve Jobs was quoted as saying "We wanted to make it perfect for you, and we think we got pretty close."

Analyst Tim Bajaran of Creative Strategies projected that Apple will sell 12 million of the new iMacs during the next three years, which would be twice the total number of iMacs sold during the its first three years. "Apple has another hit on its hands," Bajaran said. "This throws a monkey wrench into people's idea of what a computer looks like."

(Source: Wired News 7 January 2002)

35.   Closer to home, we see several 'Made by Singapore' creative products that have entered our homes and complemented our lifestyles. The Banyan Tree Hotels and

Resorts and the Aman Resorts chains are examples of the creative infusion of elements of Asian arts and traditions into the development of luxury boutique resorts. These hotel chains are extremely successful and have gained many international accolades and awards.

Augmented Product Case #4: Banyan Tree Hotels & Resorts

"Banyan Tree Hotels and Resorts is honored to announce that it has arrived at the apex of quality after just five short years since its inception in 1996. To date, the top luxury boutique resort chain has been showered with over 26 prestigious awards around the world by acclaimed establishments including Conde Nast Traveler US, Conde Nast Traveller UK, Zagat Survey 2001, Pacific Asia Travel Association (PATA), Travel Trade Gazette (TTG), Travel and Leisure US."

(Source – Press Release 2001)

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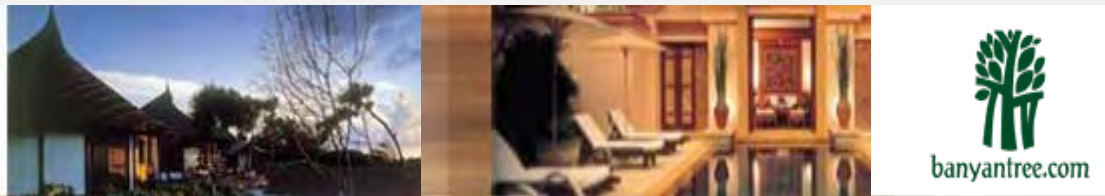
36.   Another home-grown example is healthcare product giant, OSIM, which has focussed a lot of energy on developing its own product design, branding and marketing strategies while outsourcing its manufacturing operations to suppliers and contract manufacturers. OSIM enjoyed a broad-based 28% turnover growth and a 39% jump in Group pretax profit, rising from S$5.3 million to S$7.4 million for the first half of the year in 2001. In all the major international markets, the OSIM Group registered even higher sales. Group turnover increased from S$63.7 million to S$81.5 million during the six-month period with significant growth rates observed in all the key countries. OSIM attributed this improvement in performance largely to the introduction of its new and enhanced products.

37.   A third home-grown example is the successful fashion brand "Song+Kelly21", which has received worldwide accolades from key fashion institutions in the world such as Barneys and has staged fashion shows in London, New York City and Australia. The designing duo has also worked with the key fashion names in the world, such as Peter Fraser, John Clang and Tag Heuer. Currently a key supplier for Singapore's Club 21, Song+Kelly21 is indeed a success story on how a "Made in Singapore" product can become a player in the international fashion scene. We believe that our niche is in the creation of Asian content, through the re-invention of our Asian ideals and traditions for export to a global audience and market, and customising non-Asian content for export to Asia.

New Media

38.   The media industry specialises in producing, transforming, packaging and distributing creative and informative products when and where it is needed. The global media industry size exceeds US$700 billion, and is estimated to grow at more than 7% per year with Asia recording the fastest growth (*source*: PriceWaterhouseCoopers). To take advantage of this fast growing sector, we need to fundamentally change our perception of the media from a means of mass communications to a whole ecosystem of inter-related value chains of creative and technological products and services. We must transform the media into creators of knowledge, innovation and entertainment to meet the demands of the 21st century. Media must be able to rapidly harness new technologies and reinvent itself to deliver totally new content, new platforms and new modes of delivery.

39.   Media can no longer be confined to newspapers, books, broadcast, and films and publications. Globally, media players are reinventing themselves into diversified content creators, aggregators, gateways, suppliers across all platforms. For example, Endemol, part of the Spanish Telefonica group, specialises in creation of successful content, and has become the leading content player in Europe. The horizontal merger of AOL and Time Warner has resulted in the largest media company in the world. The original Internet Service Provider (AOL), publisher (Time) and film/TV production company (Warner) is now a major media gateway as well as content creator across various platforms including on-line, broadband, TV and film.

40.   We are therefore seeing the convergence of creative content and delivery technologies giving rise to entirely new products in a new media environment, with tremendous growth opportunities. For example, IDA estimates that the global opportunity size of digital media alone to be in the range of US $200 - $300 bil in 2004, with the Asia Pacific responsible for 25% s – 40% of the global market. Singapore has the opportunity to capture US$5 – 24 billion if we become one of the top 3 – 5 digital media capitals for revenue flows[10].

> ### *What is Digital Media?*
>
> *In the last 5 years, there has been a proliferation of digital channels (eg broad band, digital broadcast, satellite) and devices (PCs, interactive TV, smart phones) that are capable of delivering a range of multimedia content and services. Content creation is rapidly becoming a commodity, with increasing use of digital processes in production, post-production, and distribution. Some of the industry areas grouped under digital media are: digital music, digital "doc", digital tools and services, ESD, games, animation and information appliances.*

> ### *New Media Case #1: MTV 360 – Surfing the Wave of Technological Convergence*
>
> *Officially launched in July 2001, MTV 360 aims to integrate its cable channels with the Internet. The plan is to schedule more of its programming across its several cable channels and website, prompting users to move from one platform to another, or to access multiple platforms simulatanrously, by way of online ads, URLs run on TV screens, and suggestions from TV hosts to go online.*

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[10] Digital Media Position Paper (IDA, February 2002)

A positive example follows: Dave Matthews Band appeared on MTV's popular show Total Request Live to promote its new album, "Everyday", in late February 2001. The band performed its new single, "I Did It" with hundreds of screaming fans below the glass-walled Times Square studio in New York City. The 360 approach landed when the viewers were directed to MTV2, the network's second channel, to watch the band's past music videos, and to MTV.com to download legally a track from the new album for free, all during the live TV show. Millions tuned in to the TV channels and visited the website and turned this into one of the biggest multi-channel audiences in the network's 20-year history. The Dave Matthews Band did well too: then newly released "Everyday", became the hottest record in the United States within a week, selling 730,000 copies.

Borrowing a quote from Judy McGrath, president of MTV Group, the MTV360 "thing unites the whole company in an unprecedented way, …it gives all of [our departments] a reason to think about how to use all [of our properties] to connect to the viewers and keep them loyal."

(Source: Digital Media Position Paper (IDA, February 2002

> *We are not looking for the "me too" types who see something successful and say "Me too, I can do that". They are followers. We're looking for trailblazers. There are more of them in the arts scene. They're always creating new things.*
>
> – Sim Wong Hoo
> Chairman, Creative Technologies

● Creative People, Creative Workforce – The Lifeblood of our Nation

41.   A country comprising creative and innovative people is key for the continued economic success of our nation. Investing in our cultural capital is crucial because it has the ability to unleash the creative potential within each individual, enabling him/her to be creative in ways that involve but also go beyond the arts. In a world marked by rapid change, globalisation and product homogenisation, the ability to develop creative solutions to management problems, product design and market development is increasingly important to economic vitality and business success. A workforce of both creative workers and entrepreneurs is critical to our continued economic competitiveness. Experiences throughout history and in other successful economies testify that it is a people and a workforce with these qualities that will drive economic and civic vitality.

> *The Arts are about developing the sense and the emotions, about promoting the growth of the imagination and the creative use of media and materials. The Arts help individuals, communities and society as whole to be more creative – in ways that go beyond the Arts themselves.*
>
> - 1993 Report from the Arts Council of Great Britain

The Arts & Culture as Sustenance

42.   The returns of investing in the creative capacity of our people, however, may not be immediate or even tangible. Yet without a creative people and a creative workforce, a nation will fail to grow and challenge its own boundaries; its economic and social development will be short-lived, and the mental lives of its citizens will be impoverished. It is in this respect that we must never forget to acknowledge that the arts and culture have always served as a source of inspiration and as a powerful avenue for individual expression, and must remain so. Through the arts, individuals are exposed to new experiences and ideas which uplift and nourish the human spirit. In doing so, they achieve personal fulfilment. To quote Chris Smith, ex-Secretary of State for Culture in UK, "[the arts and culture are] about helping to lead each and every one of us into a glimpse of a deeper world than that which exists simply on the surface"[11]. Investment in our cultural capital will provide more opportunities for Singaporeans to nourish our inner selves, and to broaden our horizons, hence giving us greater depth of character. This translates into a more well-balanced society, and a stronger and tighter social network. This is critical especially in today's tumultuous times where the social health of our society is constantly challenged.

43.   However, in Singapore, culture and the arts are often viewed as luxurious goods, which confer few economic benefits and serve only as entertainment to those who can

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[11] Creative Britain (London: 1998), Chris Smith.

afford it. Investment in the arts therefore often lags dramatically behind that in science and technology, which yields more immediate and tangible outputs. Many individuals also hold a common, albeit flawed, perception that creative professions such as acting and design lack prestige and fulfilment vis-à-vis professions such as medicine and law. It would be a key prerogative to bring about a paradigm shift in the hearts and minds of our people to value the arts and culture as primary in unleashing the individual's human potential and in developing cultural capital as a key creator of wealth and opportunities in the economy. Only with this new paradigm can we realise the full value of our cultural capital as a key pillar of our nation's new innovation-driven economic ecosystem.

Arts Education as Economic and Cultural Investment

44.   Education is the key to enable this paradigm shift and mindset change. Educators have observed that students develop creative thinking through the arts and transfer that capacity to other subjects. Studies have also shown that when the arts are a strong component of the school environment, students achieve higher grades and better scores on standardised tests such as SAT, while demonstrating lower drop-out rates and absenteeism[12]. Furthermore an arts education can build specific skills that the business world values, such as goal setting, flexible thinking, tolerance, co-operation and teamwork, creative problem solving, self-confidence and motivation[13].

45.   Whilst our local education system does support the arts and culture, the arts and humanities have not been given enough significance and emphasis as the other core subjects such as Mathematics, the languages and Science. Although there are specific Art Education Programmes (AEP) available for schools, a lack of devoted course time and a lower prioritisation of the importance of the arts and culture have impeded cultural appreciation from fully taking root in our students.

46.   In addition, our focus so far on raising general literacy and language abilities is not sufficient to build a creative people able to tap into the global currents of thought and innovation. There is a need now to educate for cultural literacy, to raise the critical capabilities and cultural awareness of our students as well as the general populace.

> *Research shows that at age five, a child's potential for creativity is 98 %. By adulthood, it is a mere 2 per cent. These are astonishing statistics and are profoundly important in making the case for placing the arts at the heart of education.*
>
> *(Source: The Creative Imperative, Arts Council of England)*

47.   Hence, whilst we have relooked our tertiary arts education system (Creative Singapore Report, 1998), more has to be done at the lower levels of education where the child is more impressionable and less fixed in her ways. The importance of the arts and culture has to be inculcated from young, and this will constitute an important foundation for increasing the creative capacity in Singapore. By saying this, we do not mean that our education system should nurture every child to become an artist. We understand that as we are small and limited in resources, it is crucial that we have a fine balance of the different groups of workers in our society. Our emphasis is, however, to instil and nurture an appreciation for the arts and culture in our young. This in turn will translate to critical skills necessary for success in the child's chosen career.

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[12] Creativity, Culture, Education and the Workforce. (Issue Brief for "Art, Culture & the National Agenda" project by Centre for Arts and Culture, US, December 2001)
[13] Educating for the Workplace Through the Arts". A special supplement to Business Week, 1996.

48.   At the same time, we need to continue to engage our institutions of higher learning in research, not only in the sciences but also in the arts and humanities. Universities around the world have been the centres of cultural activities and at the forefront of innovation and thought. It is of no surprise that the New England region in USA, known for its institutions of higher learning including Harvard and MIT, is responsible for the highest concentration of patents in the country. There is yet potential for our institutes of higher learning to provide both research and an environment to anchor the development of cultural capital in Singapore.

> *Our economy is measured in numbers and statistic, and it's very important. But the enduring worth of our nation lies in our shared values and soaring spirit. So instead of cutting back our modest efforts to support the arts and humanities, I believe we should stand by them, and challenge our artists, musicians and writers…so that we can remain the world's beacon of liberty and creativity, long after the fireworks have faded.*
>
> – Bill Clinton
> Fomer President, USA
> State of the Union Address, 1997

● **Connected Nation
 – An Attractive and Resilient Society**

A Compelling Ecosystem for Global Talent and Business

49.   Cultural capital not only contributes to the economy, it is also a key determinant of the attractiveness of a nation to global talent and businesses. In the new economy, the winners of the global war for talent will anchor their future competitiveness. A flourishing cultural environment has become an advantage for urban centres competing in this global war for talent. The top cities of the world – London and New York – are magnets for global talent not only because of their good infrastructure and reputation as important financial centres, but also because of their cultural vibrancy and the lifestyles of a cosmopolitan society. In land- and resource-scarce Singapore, a vibrant and active arts and cultural scene is even more crucial to attract foreign talent to augment our small labour force.

50.   Many surveys have emphasised the importance of cultural vibrancy and a high quality of life as an important factor in the foreigners' decision whether to relocate their businesses and their homes to a new country or region. For example, recent research at Carnegie-Mellon University has shown that an artist-based "bohemian index" was the single best indicator of a community's ability to attract the "high human capital" individuals that characterise high technology workers[14]. This idea was reflected in SM Lee's comment[15] that, having become a safe and orderly society, Singapore now needed a few "little Bohemias", where the academic and professional community could gather for the ambience and to do their own creative thing.

Fostering Emotional and Social Ties

51.   Cultural capital also plays a key role in developing a civic society and strengthening the emotional and social bonds of our people to the nation and the community. Shared cultural experiences bring people together and bond communities while heritage preservation is critical to the nation's memory and our sense of identity. Furthermore, the humanities helps to foster a deeper understanding of international, national and regional cultures, and offers lessons on the human condition connecting individuals to the community and to each other. All these cultural resources are critical to

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[14] Competing in the Age for Talent: Environment, Amenities and the New Economy. (Report prepared for the R. K. Mellon Foundation, Heinz Endowments, and Sustainable Pittsburgh, January 2000)
[15] This comment was made at the Ho Rih Hwa Leadership in Asia Public Lecture (February 2002).

strengthen a nation's social fabric, thus engendering a sense of social inclusion among our people.

52.   Some good practical examples on how the arts can be used explicitly to address social problems can be found in the US.   Today, 60% of arts agencies have developed innovative arts activities for community improvement targets such as youth-at-risk, crime, racism and homelessness. Local decision-makers have discovered that supporting an arts program is more productive and less costly than adding officers to the police force[16]. In addition, a recent study by the Chicago Centre for Arts Policy found that participants in informal arts projects cultivate social skills that promote tolerance across the social boundaries of age, gender, race and neighbourhood, and the ability to imagine social change[17]. By informal arts, we refer to cultural participation within the community which can be found in park district facilities that offer painting and folk dancing classes, local branch library poetry workshops, faith-based choral groups, etc.

Globalisation and Cultural Diplomacy

53.   In today's globalised world, the tension between trade and culture has reflected the need to study the role of culture in international relations and dialogues. Sustaining our relations and goodwill with other countries is important for the continued health of our political and economic climate, and this is another reason why we should invest in our cultural capital. The arts and culture is often viewed as the ultimate ambassador, transcending all boundaries and obstacles. In this global village, understanding the culture of other peoples and nations is not only essential to international co-operation, but equally so for successful commerce. Hence, investing in the cultural literacy and diplomacy of Singapore's will be essential to sharpen our competitive edge in this New Economy.

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[16] Strengthening Communities through Culture. (Issue Brief for "Art, Culture & the National Agenda" project by Centre for Arts and Culture, US, November 2001)
[17] More than a Hobby: Adult Participation in the Informal Arts. (Paper presented at the Conference on Social Theory, Politics and the Arts, Washington DC, October 2000)

In New Singapore, there will be abundant opportunities for Singaporeans and global talent to work and do well...New Singapore will be one of the world's finest, most livable cities. Arts, theatres, museums, music and sports will flourish. Singapore will be a lively and exciting place, with plenty to do and experience. Our city will not only have depth, but also the richness of diversity. But above all, Singapore will be a home for Singaporeans. It will be the best home for us to raise our children, a warm and safe home with a good heart and sound values, and where strong bonds unite us as one family.

- PM Goh Chok Tong
National Day Rally 2001 Speech

V. BROAD RECOMMENDATIONS

54.   Section IV outlined the key arguments for investing in our cultural capital, highlighting both the economic opportunities as well as the cultural and social imperatives. Although Singapore lacks the historical depth and cultural richness of cities such as London and New York, there are many substantive steps we can take to effect a paradigm shift in our arts and cultural development strategies so far. **A new agenda is needed as we re-make Singapore, to better develop and deploy our cultural capital in all its fullness and possibilities.**

55.   As part of this new agenda, we propose below an initial list of broad strategies. The list is neither exhaustive nor definitive, but serves as a starting point in realising the potential of our cultural capital: –

A National Collaborative Strategy

Developing the Creative Cluster
-    National Design Initiative
-    New Media Strategy

Nurturing a Creative People and Workfroce
-    Arts and Education
-    "Arts Everywhere" Initiative

Building a Connected Nation
-    Knowledge Singapore
-    From Intelligent Island to Connected Island
-    Emotional Connections & the "Marketing Singapore" Initiative
-    Social Connections

National Collaborative Strategy

56.   To evolve a Creative and Connected Singapore, a national concerted approach must be adopted to involve all players with vested interests in harnessing the full economic and social potential of cultural capital. MITA could be tasked to spearhead the co-ordination and development of our new cultural policies in the New Economy, whilst garnering support from other government agencies in a Singapore Inc. manner. Besides MITA and players in the creative sector, the following partners could be involved:

- Ministries and statutory boards involved in tourism, education, manpower planning and development, economic development, trade, transportation, urban development, housing, finance, etc (i.e. STB, MOE, MOM, EDB, IE Singapore, SPRING, JTC, LTA, URA, HDB, MOF)
- Educational institutes at all levels
- Technology companies which see in the creative sector opportunities for new product development and markets
- Businesses from outside the creative sector that employ creative workers, hire "applied arts" services or enjoy the benefits of a rich cultural scene for recruitment and retention purposes
- Financial institutions and investors (including venture capitalists) who recognise the unique financing needs and opportunities within the creative sector
- People Sector such as People's Association, Community Development Councils, Non-Government Organisations, volunteer bodies and individuals, associations such as clans and expatriate bodies, etc
- Embassies which usually have a Political or Second Secretary in charge of arts.

Example of a National Collaborative Effort: The Garden City Action Committee

In 1973, the then Prime Minister Mr Lee Kuan Yew formed the Garden City Action Committee, recognising the need for a steering committee to co-ordinate and guide the greening efforts and to mediate amongst the agencies involved. Since then, Singapore has undergone a dramatic transformation into the green and beautiful city we see today. The results of this committee's efforts show the efficacy and importance of a national co-ordinating strategy to spearhead change.

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57.   The national strategy will aim to achieve the following objectives:

- Raise awareness of the full economic and social value of cultural capital
- Foster creative partnerships and collaborative strategies with government agencies and the private and people sectors to promote the growth of the creative economy and society
- Proxy for Government investment in the necessary resources required to nurture a Creative Singapore, such as funding, talent and infrastructure.
- Formulate and promote policies that will further the interests of a Creative and Connected Singapore
- Research on the key issues and challenges intersecting with the growth of cultural capital
- Promote dialogue and exchange among industry players within and beyond Singapore

Developing the Creative Cluster

58. A key focus of the national collaborative strategy would be to develop the creative cluster into an engine of growth for Singapore's economy. First and foremost, the **economics of the creative cluster in Singapore must be studied in further details**. This would involve the collation of statistics for the creative cluster as a discrete entity, projections for future growth, as well as defining indicators to measure the success of new investments in creative industries.

59. As for specific measures to promote the creative cluster, two new initiatives are proposed to tap on the promising fields of design and media:

a) **National Design Initiative** – The **Design Singapore** initiative will capitalise on opportunities arising from "applied arts", to further develop the economies of this promising sector through strategies and alliances focussed on jump-starting and nurturing industry growth. New fiscal schemes such as venture capital funding, seed funding and co-investment schemes to develop this industry are proposed. Design Singapore will also "brand" Singaporean design and promote the value of design in all activities of our economy. MITA will work with IE Singapore to inject strong design elements in our international marketing activities as a form of returns from investment in arts and culture development.

b) **New Media Strategy** – A **Media 21** blueprint will be formulated to exploit the opportunities created by the convergence of content and drive the development of cultural capital from the media perspective. The initiative will take our local media industry beyond the traditional print and broadcast sector to include the wider cultural industries such as film, digital media, design etc. The objective is to develop a concerted and co-ordinated approach to media development, leveraging on cross-industry strengths and resources. Robust strategies would be outlined to grow and reap the economic benefits of the cultural cluster, to encourage our players to make forays outside Singapore and compete against regional and global players. Suggested ideas under the Media 21 Initiative include the following:

- Formation of a new **Media Development Board** – As a proposal on the drawing board, this entity can comprise the Singapore Broadcasting Authority (SBA), Films and Publications Department (FPD) and Singapore Films Commission (SFC) and take on a more developmental focus. This will enable us to be more responsive to the demands of society and industry, in developing the cultural cluster and calibrating censorship standards across different media.

Nurturing a Creative People and Workforce

60. People are at the core of the creative nation and economy. They not only fuel the demand for a vibrant cultural scene, they are also the vital lifeblood of the creative sector.

a) **Education** – The role of education is fundamental to cultivate an appreciative and critical audience for cultural experiences, to unlock the latent creativity of our people as well as to develop talents who participate in the creative cluster. To nurture the

human capital base for a Creative Singapore, the following aspects should be looked into:

- Develop and integrate a strong arts and humanities component into the core education curriculum from pre-school to university levels

- Forge strong partnerships with the creative sector to bring cultural experiences into the schools and vice versa

- Forge strong links with industry players to design education and training programmes which are highly attuned to new and emerging job opportunities within the creative sector

b) **"Arts Everywhere" Initiative** – To make arts, culture and heritage more accessible and available to Singaporeans at all rungs of the society, an "Arts Everywhere" initiative is proposed. It is also through this initiative that we hope to create new affiliations in our society that cuts across all demographic groupings, hence strengthening our social network. This would entail additional investments in our software in both the traditional and applied arts sectors, as well as in new arts, cultural and heritage facilities. Programmes being explored to bring the arts experience closer to the people include:

- Regional arts centres in the HDB heartlands

- Global Artists in Residency programme

- Partnerships with other ministries and community groups

- Establishing coherent strategies to develop stronger career pathways for our local talents

- Children's Museum

Building a Connected Nation

61.   Cultural capital is crucial to build a resilient and cohesive nation, with a strong network of connections among individuals, homes, communities within Singapore, as well as globally.

a) **Knowledge Singapore** – Connections take on many forms. First, we need to connect our people to useful and accessible knowledge, through both virtual and physical channels. Our public libraries and archives are a key source of information and play an important role in our nation's lifelong learning movement. Moving beyond educating, entertaining and informing the public, these institutions are well-positioned to perform the role of knowledge arbitrage and catalyse the development of the information services sector in Singapore.

b) **From Intelligent Island to Connected Island** – The second form of connection is technological in nature. Technological networks serve a vital role as conduits for knowledge and creative content. We need to equip our people with the most advanced infocomm facilities and applications in all sectors of the economy and society so as to evolve a **Connected Island** to support our economic growth in the

Age of Innovation. IDA's strategic blueprint – **"Infocomm 21"** – will be updated to comprise new strategies, such as the enhanced development of content to strengthen this industry, and the provision of affordable broadband access to all. It will also work closely with other agencies exploiting and exporting the Infocomm and Media cluster.

In addition, Singapore could be positioned as Asia's "working laboratory" for the incubation and research and development of new info-comm ideas, technologies and services. Over the longer term, by tapping on existing capital, skills, infrastructure and experience spread out across Asian cities, IDA hopes to see the emergence of an Asian IT Belt.   If successful, this IT Belt will present immense collaborative opportunities for a Connected Asia to create new value in the global economy.

c) **Emotional Connections & the "Marketing Singapore" Initiative** – The tragedy of the September 11 attacks and the recent religious issues in Singapore have illustrated that economic viability has to be supported by a strong sense of common purpose and identity. As the guardian of Singapore's shared values and heritage and the Government's Public Relations arm, MITA has a role to play in deepening Singaporeans' emotional ties to Singapore and giving them hope and inspiration for the future. Beyond Singapore, MITA will also need to work closely with key agencies to project a more holistic branding and image of Singapore internationally. The role of cultural diplomacy in fostering international trade co-operation and goodwill must also be further explored.

d) **Social Connections** – A final form of connection is the social links between people and communities. Cultural capital bonds communities and helps them adapt to change. By democratising knowledge and technology and making it accessible to individuals at all rungs of the society, we help to bridge social and digital divides to bring about social inclusion. Participation in shared cultural experiences also help to bring together individuals and communities. Hence it is through the various initiatives described above that we work towards strengthening the social fabric of our nation.

VI. CALL FOR A NEW FUNDING PHILOSOPHY

62.   In this paper, we have laid down the arguments for the importance of cultural capital. We have also put forth a proposed action agenda for developing a Creative and Connected Singapore over the next 5 years, as part of a long-term investment in our cultural capital. Finally, we will take a critical look at our current funding framework to examine whether it can offer sustainable and strong support for the action agenda we have just spelt out.

Benchmarking: Funding for the Creative Sector

63.   As evident in countries that have developed rich cultural capital, a **comprehensive web of funding support from the Public, Private and People Sectors is required to fuel growth in the cultural sector**. While it is difficult to make direct comparisons across countries for arts funding, it is clear that although the Singapore Government has invested a substantial amount in cultural infrastructure thus far, the overall spending and funding in software lags behind that of global cultural cities (Table 1).

Item	Singapore 2000 –2001	London 1997/1998 (1=S$2.43)[18]	New York City 1998 (US$1=S$1.69)[19]	Glasgow 1997/98 (1 = S$2.43)	Hong Kong 1997/98 (HK1 = S$ 0.2)
Per Capita funding Incl. Capital expenditure	S$26.42	S$143.04	S$44.38	S$25.62	n.a
Excl.Capital expenditure	S$7.27	S$108.72	S$32.85	S$18.67	S$24.83

Table 1: Comparison of Government Funding for the Arts (*Source: Renaissance City Report 2000*)

64.   The level of private and corporate sponsorship of cultural activities in Singapore is also lacking when compared to international standards. For example in FY1999, total arts sponsorship was S$38.4 million (in cash and in kind). This is as compared to USA, where in 1995, the "arts, culture and humanities" sector received approximately US$10 billion in philanthropic funding, contributing up to 40% of the total incomes of performing arts groups, museums, libraries and non-profit arts organisations[20]. Similarly in the UK, arts centres such as the Barbican obtain only one-third of their funding from Government sources.   The remaining funding is split between cultural philanthropy and earned income from ticket sales, merchandising, etc.

65.   The USA experience has further shown that there is a clear parallel between the federal investment in culture and the willingness of corporations, foundations and individuals to support cultural activity. Both private and public sources of funding rose

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[18] Average for 1997.
[19] Average for 1999.
[20] Creative America: A Report to the President by the President's Committee on the Arts and the Humanities. Published in 1997.

dramatically after 1965, when the federal government created the National Endowment for the Arts, the National Endowment for Humanities and the Institute of Museum and Library Services. Grants from these Endowments were matched with private money, providing overwhelming evidence that the federal 'seal of approval' convinces other funding sources to contribute.

66. **Henceforth, for us to reap the full benefits of cultural capital, enhanced government funding is necessary as it not only catalyses the development of nascent cultural activities but crucially, it also serves as a strong signal to the rest of the society that cultural capital is worth investing in, and therefore spur greater private and corporate philanthropy and sponsorship.**

67. Increasingly, we are also seeing global examples of **financing schemes customised to catalyse the growth of creative businesses**. An example is the Creative Advantage Fund in West Midlands, UK, which was established with support from the European Regional Development Fund, to provide venture capital to assist the growth of creative businesses[21]. The Fund helps to address some of the difficulties that companies in the creative industries have in attracting venture capital funding because of their smaller size and relative risk perceived in this young sector. The Fund is dedicated to the commercial exploitation of products and services made by creative businesses and will provide capital investments of up to £130,000 for new and established creative businesses.

68. In the UK, creative individuals and businesses can also benefit from the £200 million National Endowment for Science, Technology and the Arts (NESTA). NESTA is unique in that it concentrates on individuals and small teams rather than institutions and companies, and they help to promote convergence of the science, technology and the arts by supporting areas that transcend the traditional boundaries between discipline or fields (more details in boxed text on pg 36).

69. Similarly, Europe has set up an innovative action research project called "Banking on Culture", to investigate and stimulate new sources of financial investment for the cultural sector in Europe[22]. Over in Canada, a $33 million Cultural Industries Development Fund (CIDF) has been set up by the Government and administered through the Federal Business Development Bank[23]. The program provides loans of between $20,000 and $250,000 to businesses in the cultural industries and multimedia. The funds can be used for working capital, expansion and other initiatives geared towards long-term growth and viability. All these examples show that the creative cluster is increasingly being recognised as a cluster with unique financing needs and tremendous investment opportunities.

Case Study: NESTA – UK's First and Only National Endowment

The £200 million National Endowment for Science, Technology and the Arts (NESTA) was set up in July 1998 under the National Lottery Act, with the core objective to "support and promote talent, innovation and creativity in the fields of science, technology and the arts". NESTA is directly

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[21] http://www.creative-advantage-fund.co.uk/
[22] http://www.bankingonculture.com/
[23] http://www.pch.gc.ca/culture/cult_ind/cidf-fdic/english.htm

accountable to the Parliament via the Secretary of State for Culture, Media and Sport. The broad directions adopted by NESTA are to:

- *Help talented individuals – or groups of individuals – to achieve their potential;*

- *Help people turn inventions and ideas into products or services which can be effectively exploited and the rights to which can be adequately protected; and*

- *Contribute to public knowledge and appreciation of science, technology and the arts.*

Some pioneer projects are described below.

- ***The Choreographer Lab***, *run by the Performing Arts Labs, gave choreographers the chance to work across disciplines – with visual artists, film-makers and composers – to develop new forms of dance.*

- ***Sci-Art*** *is a competition inviting scientists and artists to work together across both fields. One of the winners – Gravity Zero – brings together dancers and scientists to investigate the control of body movements in altered gravity conditions.*

- ***Alex Mayhew's Dreamer*** *is a new kind of computer game where the emphasis is on emotional drama and story telling.*

- ***Giles Revell*** *is a photographer, who has refined a scientific imaging method to create stunningly detailed photographs.*

- ***The Ephemeral in Focus*** *is a project led by Dan Harvey and Heather Ackroyd, two artists who make exceptionally beautiful works of art from growing grass, which is also opening new avenues of research and product developnment for scientists at the Institute of Grassland and Environmental Research.*

(Source: Looking Ahead: NESTA's Strategy 2000 – 2003
http://www.nesta.org.uk)

A New Investment Paradigm for the Singapore Government

70.   For our new vision and strategy to succeed, we would like to recommend that the Government adopt a fresh approach towards public funding to develop our cultural capital. Cultural capital, as we have shown in the preceding pages, has the ability to enhance national competitiveness, quality of life as well as individual and social well being. We propose that the Government adopt a long-term investment perspective to develop and nurture our cultural capital. This could be done through the enhancement of dedicated government funding, in the form of **percentage of our GDP**, to provide the core funding component. This is particularly important, especially in the initial years, as high promotional costs will be involved in changing public mindsets and value-perception of the arts and culture. In addition, by aligning the vision and strategies of relevant agencies to work together in a national collaborative strategy, **creative partnership funding strategies** could be formulated to leverage on existing sources of funding to unleash the full economic and social potential of cultural capital.

71.   It is further proposed that the government set up a dedicated funding and investment framework to foster a more creative and connected economy and society. This **Creative Singapore Development Scheme** (CSDS) will play a crucial catalytic role to develop cultural capital in Singapore, by sending out a strong signal to our people that the creative sector is worthy of investments and support. We have suggested some examples below of how CSDS could be deployed in Singapore, although it is critical that we study in greater detail on how other countries' schemes are deployed, in order to ensure the best use of our CSDS funds. CSDS funds could be used to:

- Develop, promote and support emerging and existing creative individuals and industries through venture capital and seed-funding schemes for promising cultural entrepreneurs. This will complement existing schemes in Singapore to cater to the specialised financing needs of the creative cluster.

- Supplement existing funding for public and non-profit creative individuals and organisations – this is important as the non-profit cultural sector offers some separation from marketplace demands and provides an experimental space for ground-breaking works to be nurtured.

- Develop and implement innovative programmes or projects to increase public access to cultural experiences. These ideas can be submitted by the Public, Private or People Sectors.

- Ensure affordable and available access to creative and cultural content by supporting the info-comm and media industries, which as emerging industries in their own right, will in turn contribute significantly to our country's GDP and competitive edge.

Encouraging Corporate and Private Philanthropy in Singapore

72.   We will also need to adopt active measures to increase and encourage greater corporate and private philanthropy for all arts and cultural events, profit or non-profit. Cultural philanthropy and sponsorship from corporations, foundations and individuals in

countries such as US and UK have achieved such maturity as a result of a long tradition of pride and prestige accorded to the arts and culture. While Singapore has a significant gap in this respect and there are currently a few tax incentives programmes in place for donations to non-profit art groups, we should look towards encouraging the private sector, including foundations and individuals, to play a bigger role in growing our cultural capital. We can do this through stepping up our efforts in the following areas:

- National recognition programmes to honour exemplary giving and volunteerism to the arts and culture by corporations and individuals

- Tax incentives to reward corporate and individual philanthropy and sponsorship for the arts and culture

- Collaborative public and private co-funding programmes to respond to the needs of creative enterprises and individuals

- Brand donor organisations with quality arts companies

- Encourage and facilitate business volunteerism in the arts through linking up individuals and corporations with arts companies

VII. CONCLUSION

73. In conclusion, this paper calls for a paradigm shift to view the arts and culture, not as consumption, but as a creative investment tool to anchor our nation's future success. In Singapore's next phase of development with its emphasis on creativity and innovation, how we invest in and deploy our cultural capital will be an important determinant of our economic competitiveness and social well being.

74. In order to realise our vision of a Creative and Connected Singapore, we must be able to mobilise our people to participate in a national collaborative strategy to unlock the full potential of our cultural capital. Government support is fundamental to catalyse a thorough transformation of our cultural landscape but this must be complemented by deep and sustainable investments and support from the Private and People sectors. **It is all about working together to create a better tomorrow for our people.**

75. The results of our investment in cultural capital may not be visible nor measurable in the immediate short term. But our patience will be rewarded in infinite ways as cultural capital takes root inside our people and manifests itself across all facets of our economy and society. We invite you to be our partner in this meaningful journey.

Country Case Study #1: America

America's Cultural Capital

With the global, knowledge-based economy, new arguments for Cultural Capital as a key driver of America's economic competitiveness have emerged. Chief amongst these is the need for a more accurate measure of America's accumulated culture and creativity. This new definition will need to stretch beyond the direct contributions of the non-profit and commercial arts ventures and cultural tourism, to a deeper understanding of how culture and creativity permeates the entire American economy and is responsible for the country's vitality, innovative capacity and resilience: -

Economic Vitality
- the relationship between the applied and other arts and other industries which provides new content and new markets or expands existing markets (e.g. the relationship between industrial design and manufacturing, visual arts and new media);

Human Capital
- the development of a innovative and highly entrepreneurial workforce for the New Economy;
- the employment and self-employment of individual creative professionals working across industries;

Innovation Habitat
- the significant improvement in quality of life, especially in attracting knowledge workers and companies to relocate[1]; and
- the creation of vibrant public spaces and the revitalisation of communities or redevelopment of decayed urban areas.

Contributions to GDP and the Labour Market

The direct and tangible contributions of the creative sectors to the American economy are well documented. The copyright industries alone, which include film, video, music, publishing and software, generate nearly US$450bn in annual avenues and more than US$79bn in global sales[2]. This, together with the non-profit arts industry which generates some US$36.8bn in annual revenue[3], account for more than 5% of GDP. Foreign sales and exports of these copyright industries (which does not include the distribution and retail industries such as video, books, tourism etc) are growing rapidly. Preliminary estimates conservatively measure foreign sales to be US$79.65 billion in

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[1] A national survey of some 1,200 high-technology workers revealed that the "community quality of life" was the second most important factor—just below salary—associated with the attractiveness of a new job The Role of the Arts in Economic Development (Washington, D.C.:National Governors Association Center for Best Practices, June 2001), 2.

[2] America's Cultural Capital: Art, Culture & the National Agenda (Washington D.C.: Center for Arts and Culture, March 2001), 2.

[3] The Role of the Arts in Economic Development, 1.

1999. As compared to 1991 whereby the export sales are estimated at about US$38 billion, this shows a twofold increase in less than 10 years.

Nationally, the creative sectors support an estimated 7.6mn jobs, excluding those in self-employment. This accounts for some 5.5% of the workforce. More importantly, this number is growing at a faster rate relative to other sectors in many regional economies. For example, the projected employment growth rate in the creative cluster in New England is 14% compared to all industries at 8%[4].

Public Policy & Investment

> *In these challenging times, when some are questioning the value of the arts and when public support for the arts is under siege from so many quarters, we must remember that these pursuits are not a luxury that we can live without -- they are a vital part of our national character, the motivating spirit that makes us who we are."*

William J. Clinton
Former U.S. President

The overwhelming evidence of America's accumulated creativity as a critical resource of her economic competitiveness has resulted in new thinking amongst public policymakers. At the heart of the new thinking is the recognition that a new framework for cultural policymaking in America is needed to provide greater coherence and coordination for cultural policies currently spread widely throughout some 30 federal agencies. This includes recommendations for a mechanism to advise and coordinate cultural affairs in the Executive Office of the President and an Under Secretary of Cultural Affairs be established, and that the Congress and the President create a national forum on Creativity and Cultural Heritage. These recommendations would raise the agenda of the arts and cultural sector to a significantly higher policy (including foreign policy) and political level than before.

Tax incentives are granted foundations, private individuals and corporations which support arts and cultural activities. Beyond tax incentives, there is now recognition that new policy tools are needed to support the substantial impact of cultural policies on "trade negotiations, anti-trust enforcement, copyright and patent law decisions, public broadcasting operations, access to airwaves…the Internet and cable, and our relations with other countries."[5]

In addition, public funding for the non-for-profit arts has won greater support in recognition of the enormous economic benefits it yields, particularly the high returns on investment. Annual direct appropriations of funds to federal agencies totaled approximately $2bn in recent years. Such federal agencies include the Smithsonian Institution, the National Endowment for the Arts (NEA) and the National Endowment for the Humanities. While funding via the NEA has fallen from US$158.8mn in 1996 to US$97.6mn in 2000, total state expenditures increased from US$262.2mn in 1996 to

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[4] The Creative Economy Initiative: The Role of the Arts and Culture in New England's Economic Competitiveness (Massachusetts: The New England Council, June 2000), 14.
[5] America's Cultural Capital, 4.

US$396mn in 2000, and local governments spent in excess of US$800mn. In 1995, the return on an estimated $761mn public spending on the arts in the state of New York alone resulted in an economic gains amounting some US$13.4bn.[6]

Other Investments in the Arts, Culture & Humanities

> *"People who create in our companies - whether they be scientists, marketing experts or business strategists - benefit from exposure to the arts. People cannot create when they work and live in a culturally sterile environment....The economic benefits of the arts greatly transcend and outlive any of the normal cycles....That is why business invests in the arts -- even when times are tough, and when there is increased pressure to manage money carefully."*

> **John D. Ong**
> Chairman Emeritus,   The
> BFGoodrich Company

The broad appeal and substantial impact of America's cultural capital has been built by a sustained investment in arts and humanities education and research beginning with the focus on interdisciplinary humanities in the schools system to the investments in humanities research at American colleges and universities. Arts and cultural activities are often embedded in the education industry. For example, at Harvard University, cultural activities alone would make it the largest nonprofit arts employer in New England[7].

It is an established practice for American corporations to invest in the arts and culture for prestige. Large corporations, such as the Rockefeller Foundation, Forbes, PepsiCo and Sara Lee have extensive private collections or are commonly associated with arts and cultural events. Even smaller companies have active arts and sponsorship schemes as part of their community and staff welfare programme.

Nationally, an estimated US$10bn from individual donors, foundations and corporations go towards supporting arts and cultural activities[8]. Together with state & federal sponsorship, and other funding from foundations, this accounts for 50% of all funding for arts and culture organisations. Business support for the arts in America reached a record US$1.56bn in 2000 among members of the Business Council for the Arts (BCA). Of this amount, some 70% were attributed to small and mid-sized companies with annual revenues of between US$1mn and US$50mn.[9] The most frequently cited reasons BCA member companies invest in the arts are to enhance the quality of life in operating communities, to stimulate the local economy, to attract visitors to the area and to provide entertainment experiences for employees and the community.

Conclusion: Values and Capital

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[6] Art for more than Art's Sake (New York, McKinsey & Company: 2001), 2-3.
[7] The Creative Economy Initiative, 10.
[8] America's Cultural Capital, 4.
[9] Annual Report 2001 of the Business Council for the Arts. http://www.bcainc.org.

While there has been recent arguments for raising the profile of the arts and culture as an economic force in public policy and funding in America, it must be said that high level of participation and the significant impact of activities in the arts and cultural sector on both the economy and community, are not engineered by public sector involvement (funding at federal level has in fact fallen in recent years). Rather, it has evolved spontaneously from a combination of factors that include government sponsorship of non-profit arts, but more so the support of businesses, foundations and individuals, as well as the respect for freedom of expression as enshrined in the American Constitution. What feeds America's cultural capital is therefore not the creative sector per se, but the intangible values of American society – respect for diversity, freedom of expression and individual enterprise – that ensures that creativity and ingenuity are celebrated and thrive.

Contributions of the Copyright Industries (USA) in terms of:
i) Value Added to GDP
ii) Share of National Employment; and
iii) Revenues Generated from Foreign Sales and Exports

In 2000, the International Intellectual Property Alliance (IIPA) commissioned an economic study on the contributions of the copyright industries in the US. The key findings of the report are as follows:

Contribution to the Economy

The US copyright industries contribute a significant share to the US economy, measured by value added and reflected in their share of GDP. In 1999, the core copyright industries[10] contributed an estimated US$457.2 billion to the US economy, accounting for approximately 4.94% of GDP. In 1999, the total copyright industries[11] contributed an estimated $677.9 billion to the U.S. economy, accounting for 7.33% of GDP (Charts 1 & 2). Between 1977 and 1999, the value added to GDP by the core and total copyright industries increased by 360% and 303%, respectively.

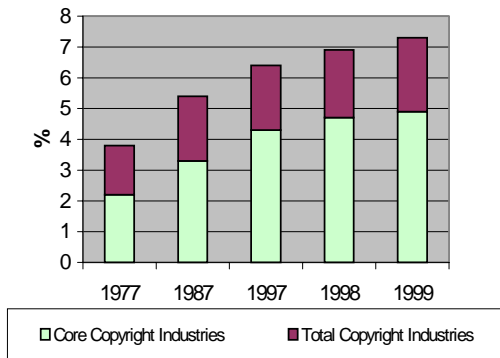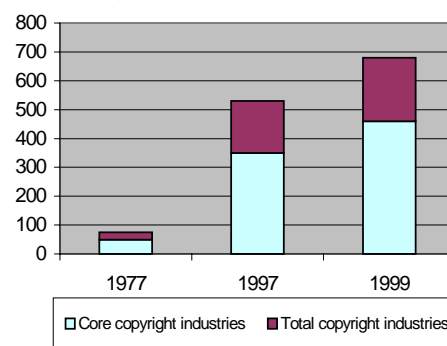Chart 1 - Copyright Industries: Value Added to GDP as Share of GDP

Chart 2: Copyright Industries: Value Added to GDP (billions of 1999 dollars)

The real annual growth rate has more than doubled the growth rate of the economy as a whole. Over the last 22 years (1977-1999), these industries grew at an estimated

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[10] The core copyright industries encompass those industries that create copyrighted works as their primary products. These industries include the motion picture industry (Television, theatrical and home video), the recording industry (records, tapes and CDs), the music publishing industry, the book, journal and newspaper publishing industry, the computer software industry (including data processing, business applications and interactive entertainment software on all platforms), legitimate theatre, advertising, and the radio, television and cable broadcasting industries.

[11] The total copyright industries encompass the core industries and portions of many other industries which wither create, distribute, or depend on copyrighted works. Examples include retail trade (a portion of which is sales of video audio, software and books, for example), the doll and toy industry, and computer manufacturing.

compound annual growth rate of 7.2% while the rest of the US economy grew at an annual rate of 3.1%.

Employment

The copyright industries have created jobs at a much faster rate than many leading sectors of the US economy such as aircraft manufacturing, pharmaceuticals, textiles etc.

Employment in the core copyright industries grew from 1.6% of the US workforce in 1977 to 3.24% in 1999. Total copyright employment grew from 3.3% of the US workforce in 1977 to 5.7% in 1999. (Charts 3 & 4)

Chart 3: Copyright Industries: Employment (in millions)

Chart 4: Copyright Industries Employment: Share of National Employment
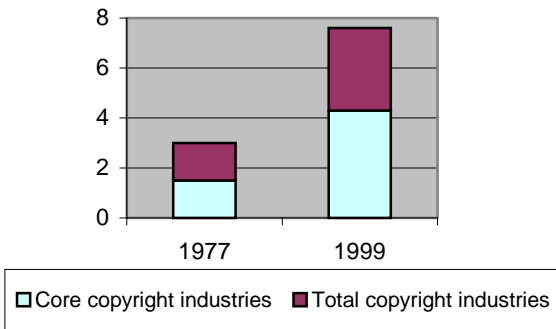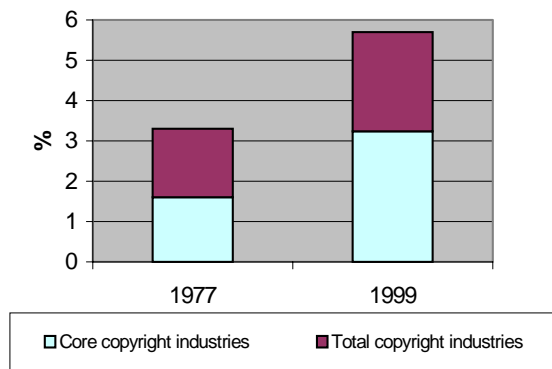

Foreign Sales and Exports

Foreign sales and exports of the core copyright industries have been increasing rapidly. Preliminary estimates conservatively measure foreign sales to be at least US$79.65 bil in 1999. As compared to having an annual growth rate of 6.4% in 1991, the annual growth rate in 1999 of 15.1% represents more than a two-fold increase.

Country Case Study: United Kingdom

UK Cultural Policy: Towards Culture & Creativity

Unlike the United States, where private philanthropy plays a key role in the cultural scene, arts and cultural development in the UK is largely government or public sector driven.

Over the last five years, the UK has built its arts and cultural policies on four key building blocks. First, excellence – the need to sustain and encourage the very best in arts and culture. Second, access – the wish to make cultural quality available to the greatest possible number of people; Third, education – the need to ensure, both in the formal school system and also through life, that artistic creativity forms a central part of what is offered as the learning experience; And fourth, the creative economy – the recognition that creativity and those enterprises that rely on creative ideas for their added value are an increasingly vital part of the national economy.

Funding reforms undertaken by the present government have dramatically increased financial support to support the above objectives. By 2003/4, the Arts Council of England's grant-in-aid will have grown to £336m, from £186m in 1997/8 - an increase of 80%.[1]

Recently, the UK government's focus has been gradually shifting towards the need to develop a creative and innovative people through the arts and culture. In its 2001 green paper on *Culture and Creativity: The Next Ten Years*, the Rt Hon Chris Smith, then Secretary of State for the Department of Culture, Media and Sport, outlined the importance of cultural activity in nurturing creative thought and how it increasingly lies at the centre of successful economic life in an advanced knowledge-based economy:

> *"In the years ahead, people's creativity will increasingly be the key to a country's cultural identity, to its economic success, and to the individual's well-being and sense of fulfillment. Successful societies in the 21st century will be those that nurture a spirit of creativity and foster the cultural activity which goes hand in hand with it. Governments cannot of course enforce creativity; but we can recognize that creativity will be central to the country's future and put in place the framework of funding and support to ensure that everyone has the opportunity and freedom to develop their creative talents."*

There has been increasing recognition, at tops levels of the UK government, that creative skills are necessary for success in all areas of life, not just the worlds of culture, media and the arts. People in all walks of life – business, education, technology – all need to develop their creative potential in order to create new perspectives and be inventive. In all areas of the economy, there is a need for people with the imagination to come up with good, innovative ideas.

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[1] *Culture and Creativity: The Next Ten Years*, Green Paper launched by Chris Smith on 20 Mar 2001, p7.

Some of the changes which the government hopes would help unleash the creative potential of individuals include educational reforms that will foster closer partnerships between schools, cultural organizations and the creative industries; the use of interactive technology to widen young people's access to cultural and heritage products and materials online; greater support for individual artists; providing free access to all galleries and museums; raising the standards and availability of library services as well as creating opportunities for knowledge sharing through the provision of internet and digital access to all.

The UK Creative Industries

"Economic value" has been a key theme in the work of the Department of Culture, Media and Sport, alongside "Access", "Excellence" and "Education". Generally, this means ensuring that the full economic and employment impact of the whole range of creative industries is acknowledged and assisted by government.

In 1998, the first *Creative Industries Mapping Document* was published as the first ever attempt to measure the economic contribution of these industries to the UK, and to identify opportunities and threats they faced. The report also recognised the close economic relationships with other sectors such as tourism, hospitality, museums and galleries, heritage and sport.

The term "creative industries", as defined by the report, referred to "those industries which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property". This would include "advertising, architecture, the art and antiques market, crafts, design, designer fashion, film and video, interactive leisure software, music, the performing arts, software and computer services, television and radio".

A recent update of the document in 2001 reported that the creative industries in the UK generate revenues of around £112.5 billion and employ some 1.3 million people. Exports contribute around £10.3 billion to the balance of trade, and the industries account for over 5% of GDP. In 1997-98, output grew by 16%, compared to under 6% for the economy as a whole[2]. More statistical details can be found in Annex 1.1.2A.

The table at Appendix A summarises the major economic and employment impacts of the creative industries in the UK.

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[2] Creative Industries Mapping Document 2001, UK, p10.

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Contributions of the Creative Industries (UK) in terms of:
i)   Revenue
ii)   Share of National Employment; and
iii)   Revenues Generated from Foreign Sales and Exports

</div>

In 2001, the latest Creative Industries Mapping documents in the UK was released. The key findings of the report are as follows:

Contributions to the Economy

The UK creative industries contribute a significant share to the UK economy, as reflected in their share of GDP. In 2001, the creative industries contributed an estimated £112.5 billion to the UK economy, accounting for approximately 5% of GDP.   This is as compared to £57.5 bil in 1998. The publishing, design and software and computer services sectors registered the highest growth over these 3 years.   The comparative figures are shown in Chart 1 and 2.

Chart 1: Creative Indust
Revenue contributed to G
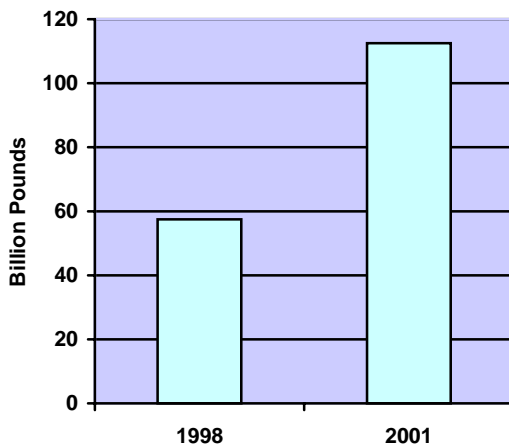
Chart 2: Design, Computer soft
& services and Publishing
Industries (Revenue earned
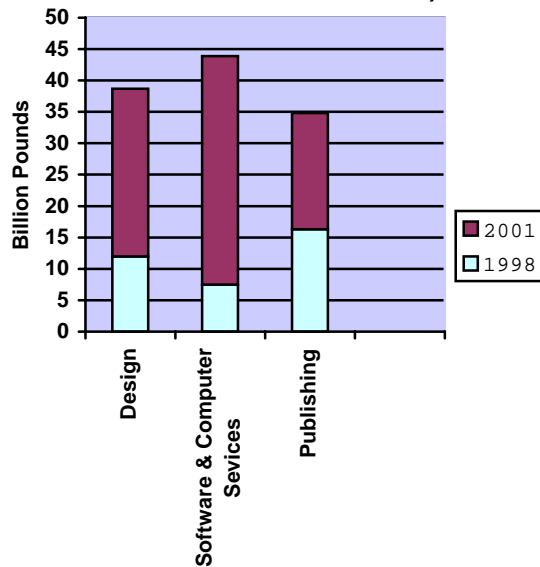
Employment And Exports

The creative industries have also created jobs at a rapid rate , employing about 1.3 million people in 2001 as compared to 966 million in 1998. In addition, foreign sales and exports have been increasing rapidly. Preliminary estimates conservatively measure foreign sales to be at least £10.3 mil in 2001 as compared to £7.5 mil in 1998. Similarly, the software and computer services, and design industries showed the greatest increase in export revenue over these three years. (Chart 4)

Chart 3 : Creative Industries Total Employment

Chart 4 : Design and Software & Computer Services Industry

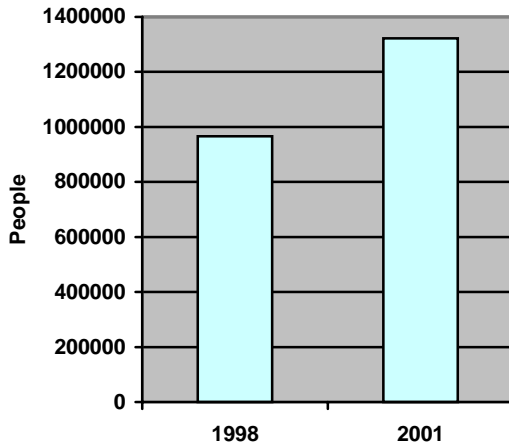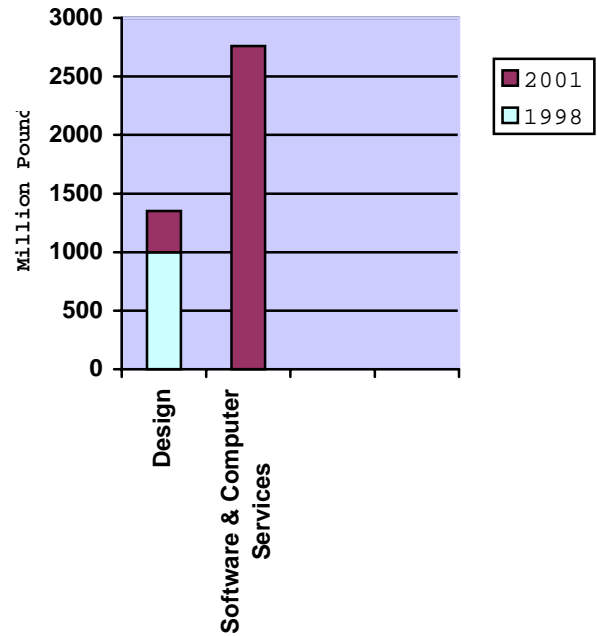| Industry	Core Activities	Related Activities	Revenues Gross	Exports	Employment
Advertising	Consumer research, Management of client marketing plans, Identifying consumer tastes and responses, Creation of advertisements, promotions, PR campaigns, Media planning, buying and evaluation, Production of advertising materials	Creative studios and freelancers, Editing facilities, Brochures/publications, Photography, filming and digital recording, Digital content generation, Multimedia and Internet production, Marketing consultancy, Exhibitions	£3 billion (1998)	£815 mil (1998)	84,900 (1998)
Architecture	Building design, Planning approval, Production information	Structural environmental, landscape and other specialist design, Urban planning, Construction cost planning and control, Heritage building conservation, Brief writing, Feasibility studies, Project Management, Appraisal of tender documentation, Construction monitoring, Internet/e-commerce	£1.7 billion (1998)	£59 mil (1998) £60 mil (1999)	24,000 (1998) 20,900 (2000)
Arts & Antiques	Trade in art and antiques, including: paintings, sculpture, works on paper, other fine art (e.g. tapestries), furniture, collectibles (e.g. mass produced ceramics and glassware, dolls and dollhouses, advertising/packaging etc.), couture (including jewellery), textiles, antiquities, arms and armour, metalwork,books, bindings, signatures and maps Retailing via auctions, galleries, specialist fairs, shops, warehouses, department stores and the Internet	Related industries: Fairs & Exhibitions, Shipping, Restoration, Printing, Photography, Insurance, Banking, Law, Tourism	£3,467 mil (1999)	£629 mil (1999)	37,063 (1999)
Crafts	Creation, production & exhibition of crafts, textiles, ceramics, jewellery/silver, metal, glass	Supply of materials, Distribution, Retail, Online retail, Packaging and display, Craft fairs, Craft magazines and books, Tools and machinery	£400 mil (1999)	£40 mil (1999)	24,200 (1998) 23,200 (2000)
Design	Design consultancies (services include: e.g. brand identity, corporate identity, information design, new product development) Design components of industry, Interior and environment design	Fine art, Graphic design, Fashion design, Crafts (e.g. small-scale furniture makers), Multimedia, web site and digital media design, Television graphics, Interactive and digital TV design, Manufacturing industry design, Research and development within industry, Modelling	£26.7 billion (2000)	£1 billion (2000)	76,000 in design firms (2000)

1

Industry	Core Activities	Related Activities	Revenues Gross	Exports	Employment
		and prototype making			
Designer Fashion	Clothing design, Manufacture of clothes for exhibition, Consultancy and diffusion lines	Magazine publishing, Design education, Graphic design, Product design, Fashion photography, Hair care and cosmetics, Accessories design, Perfumes design, Modelling	£600 mil (1996)	£350 mil (1996)	11,500 (1996)
Film & Video	Screenwriting, Production, Distribution, Exhibition	Music soundtracks, Promotion, Set design building, Catering, Equipment manufacture, Video rental, Photography, Lighting, Sound recording, Costume design, Selling film and video distribution rights, Film and tape delivery and storage, Videos on demand, Digital film distribution, Film web sites, Post-production/special effects, Computer games, Multimedia and digital media	£3.6 billion (1998)	£581 mil (1998) £653 mil (1999)	48,100 (1998) 44,500 (2000)
Interactive Leisure Software	Games development, Publishing, Distribution, Retail	Video sequences (using actors, directors, crew), Music soundtracks, Digital TV gaming, On-line gaming, Gaming for mobile phones, Computer manufacture, distribution and retail, Games console manufacture, distribution and retail, Merchandise, e.g. clothes	£831 mil (1998) £969 mil (1999)	£503 mil (1998)	21,500 (1999)
Music	Production, distribution and retailing of sound recordings, Administration of copyright in composition and recordings, Live performance (non-classical), Management, representation and promotion, Songwriting and composition	Music press, Multimedia content, Digital media, Retailing and distribution of digital music via Internet, Music for computer games, Art and creative studios, Production, distribution and retailing of printed music, Production, retailing and distribution of musical instruments, Jingle production, Photography, Education and training	£4.6 billion (1998)	£1.3 billion (1998)	122,000 (1998)
Performing Arts	Content origination, Performance production, Live performance of ballet, contemporary dance, drama, music-theatre and opera, Touring, Costume	Tourism, Pubs and restaurants, Business sponsorship, Festivals management, Management of venues – theatres, halls, places of public entertainment, Education, community music, Merchandising,	£470 mil (1999)	£80 mil (1999)	75,400 (1998) 74,300 (2000)

2

Industry	Core Activities	Related Activities	Revenues Gross	Exports	Employment
	design and making, Lighting	Catering, Sound tracks, Programme publishing			
Publishing	Origination, Book publishing: general (fiction and non-fiction), children's, educational , Learned journal publishing Newspaper publishing: national and regional, Magazine publishing: consumer, business to business, customer, Digital content publishing	Internet and digital media, Disc based media production, Electronic storage, Libraries and education, Market research, Management consulting, Academic research, Distribution, Printing, Paper and ink manufacture, Exhibitions and Conferences, Masthead programming	£18.5 billion (2000)	NA	141,000
Software design	Software Development: system software, contract/bespoke, turnkey solutions, Systems integration, Systems analysis and design, Software architecture and design, Project Management, Infrastructure design	Facilities management, Consulting and training, Supply of contract staff, Office software and equipment, Software maintenance, Hardware design, manufacture and maintenance, Information supply and distribution, Communications services, Research and development	£30.3 mil (1998) £36.4 mil (1999)	£2.76 billion (1998)	420,000 (1998) 555,000 (1999)
Television & Radion	Production, Programme and packaging (libraries, sales, and channels), Broadcasting (scheduling and media sales), Transmission	Internet and digital radio, Digital media broadcasting, Digital and interactive television, Computer games, Multimedia and digital media, Personal video recorders (PVRs, e.g. TIVO), Video on demand, Art and creative studios, PR companies, TV commercials production, Photography, Manufacture of hardware	£10.6 mil (1998) £12.1 mil (1999)	£444 mil (1998) £446 mil (1999)	101,000 (2001) 102,000 (2002)

INVESTING IN CULTURAL CAPITAL
A NEW AGENDA FOR A CREATIVE AND CONNECTED NATION

- June 2002 -

Key Inputs since March 2002

- Cultural Capital Study Mission led by Dr Tan Chin Nam, PS (MITA) to Hong Kong, United States and United Kingdom on 5 – 16 April 2002
- MITA & Partners International Advisory Programme on "Developing a Creative and Connected Singapore" on 29 – 30 April 2002
- Design Study Mission led by Mr Choo Thiam Siew, CEO (NAC) to Spain, Italy, Germany, Denmark, Finland and United Kingdom on 8 – 26 May 2002
- Media International Advisory Programme on 17 Jun 2002
- Meetings with economic agencies, creative personalities, etc

Significant Findings

The Creative Economy is Driven by the Convergence of Arts, Business and Technology

Singapore is moving into a challenging new phase of economic development. We are seeing diminishing returns from the factor-driven strategy that had served Singapore so well in the past four decades. To secure for Singapore a competitive niche in tomorrow's global economy, we will need to unleash our creativity in all sectors of the economy and society. Creativity, defined as the ability to connect the previously unconnected so as to produce something original and of value, will be the key to new wealth creation.

The convergence of arts, business and technology will be the main driver of the new Creative Economy. **It is about exploiting the multi-dimensional creativity of our people to fuse artistic and cultural creativity with technological innovation and business entrepreneurship into a potent recipe for success**. At the heart of the Creative Economy is the Creative Cluster, comprising industries which directly or indirectly produce cultural products, and which have a potential for wealth and job creation through the generation and exploitation of intellectual property. The Creative Cluster has a far-reaching economic impact which transcends industry boundaries. For example, design enhances the value of products and services across all sectors of the economy. The World Tourism Organisation also asserts that cultural tourism accounts for 37% of global tourism and forecasts that it will grow at a rate of 15% per year.

A Strong Arts and Cultural Base is Critical to the Success of The Creative Economy

For Singapore to develop a Creative Economy, we would need to first establish a strong non-profit artistic and cultural foundation in Singapore. For example, we observe that the design models of the leading European cities of design - including Spain, Italy, Germany, Denmark, Finland and UK - are deeply steeped in their culture and history. The need to recognise the intrinsic value of the arts is therefore fundamental to the process of unleashing the economic value of the arts and culture.

Global Competition is Intensifying

Singapore needs to move fast. There are many global examples of countries, cities and communities which are placing increasing emphasis on developing a Creative Economy. At the forefront are countries such as **UK and US**, which have invested significant time and effort to better understand the scope, nature and factors of success for the Creative Economy.

Nearer home, **Hong Kong** aspires to be the events capital of Asia. It is developing a integrated arts, entertainment and cultural district at a 40-Ha prominent waterfront site within the West Kowloon Reclamation Project. In a highly publicised international Concept Plan Competition, renowned architect Norman Foster and Partners won the first prize for its conceptual proposal of a canopy-covered landmark. Similarly, **Shanghai** is fast gaining the reputation of a culturally vibrant city with its expanding menu of cultural happenings, including world-class events such as international music, arts, film and design festivals. Its first professional music theatre – an iconic building designed by French Architect Paul Andreu – will be opened in 2004.

In the area of media, a flurry of activities is taking place to capitalise on the convergence of telecommunications, broadcasting, IT and cultural content. Initiatives range from content seed funding, industry development strategies to ambitious projects to create integrated "work, live, play" ecosystems for innovation and creativity to thrive. Some examples of the latter include:

- **Seoul Digital Media City**
  - Conceived as a world-class digital media innovation complex and production centre, Seoul Digital Media City will focus on creating cultural content in areas such as broadcasting, movies, games, music and e-learning.
- **Dubai Media City**
  - Dubai Media City positions itself as the media community for the region offering world-class infrastructure, talent, services and technology. It is situated within the Dubai Technology, Electronic Commerce and Media Free Zone (TECOM), which also comprises the Dubai Internet City and Dubai Ideas Oasis.
- **Ireland Digital Hub**
  - A development project to cluster Irish and international new media companies, research and development, and learning & training initiatives in the Liberties area of Dublin.

Importance of Creative Education

The Creative Economy will only be able to take flight if software is developed in parallel with hardware. Based on the Cultural Capital International Advisory Programme and other feedback sessions, we conclude that there is a need to develop four levels of creative capabilities (see figure on left):
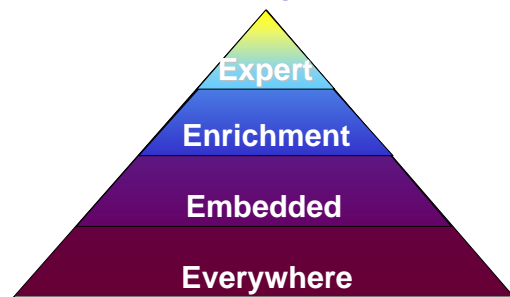
Some specific recommendations include:

Four Levels of Creative Capabilities

- Expert
- Enrichment
- Embedded
- Everywhere

Expert

…arts for employability; opening up new career possibilities

- Offer Visual Arts, Design and Media Education at University Level
  - Elevating arts education to a higher level. Previously only available up to polytechnic level.
- Set Up Specialised Arts and Design Secondary Schools
  - Nurturing talented students from young for a career in the creative cluster. Similar to the Chartered High Schools in Philadelphia and Florida which provided students with a good grounding in architecture and design topics

Enrichment

…arts for individual fulfilment and inspiration; cultivating audiences

- Expand Base of Schools offering Music and Arts Electives at 'O' and 'A' Levels
  - Allowing more students to pursue their interests in the arts as part of their school curriculum.
- Renew Emphasis on Literature
  - Literature as the key to appreciating the performing and literary arts, and developing more effective communication skills
- Restructure Tertiary Education to Allow Broad-Based Education before Specialisation
  - Enabling our young to view things from a multi-disciplinary perspective and to nurture their multi-dimensional creativity (i.e. fusing technological innovation, entrepreneurship and artistic creativity)

Embedded

…inculcating a "creative" mindset

- Encourage the Use of Arts, Design and Media as Tools for Teaching Other Subjects
  - For eg, drama to teach language, video technology for science projects, etc
- Enhanced Design Curriculum in Business and Engineering Courses
  - Design as a critical enabling skill for the business and manufacturing sectors.
  - The Strategic Manpower Conversion Programme as a possible avenue to instil the "designer" mentality in our workforce?

Everywhere

…enhancing Singaporeans' (the general public's) artistic and cultural quotient

- "Arts Everywhere" Initiative
  - For eg, HDB Regional Arts Centres and public arts expenditure as % construction costs
- Lifelong Learning for Arts and Culture
  - Cultural literacy programs to enable Singaporeans from all walks of life to appreciate art and design; nurturing more sophisticated consumers and audiences.

Creative Space and Freedom

There is a general consensus that Singaporeans can be creative, but that this creative ability is often suppressed by societal restrictions. Employees have to be given explicit permission by their employers before they dare to innovate. This mindset has to be changed through the education system and public messaging.

COPYRIGHT INDUSTRIES

The definition of the copyright industries used in this paper follows the Australian framework, which is defined slightly differently from the UK model[1]. There are three broad groups, i.e.

- core copyright industries
- partial copyright industries
- distribution copyright industries

The industries included in each of the three broad groups are presented below:

Core Copyright Industries	Partial Copyright Industries	Distributive Copyright Industries
• Recorded media manufacturing • Printing and publishing of newspapers • Printing of periodicals, books and magazines • Publishing of books, brochures, musical books and periodicals • Other periodical publishing (journals, periodicals and magazines) • Free to air TV/Pay TV/Internet services providers • Data processing services (IT consultancy, IT development and IT Services) • Television services • Radio services • Film and video production • Music and theatre production • Commercial art and display services • Photographic studios	• Printing of cards, stationery, etc • Services to printing • Architectural services • Surveying services • Advertising services • Toy and sporting good manufacturing	• Newspaper, book and stationery retailing • Paper product wholesaling • Book and magazine wholesaling • Computer and software retailing • Photographic equipment wholesaling • Photographic equipment retailing • Toy and sporting good wholesaling • Toy and game retailing • Recorded music wholesaling • Recorded music retailing • Libraries • Motion picture exhibition/distribution • Photographic film processing • Film and art venues/performing art venues/sound recording studio/services to the arts • Museums/Arts galleries • Video hire outlets • Information storage and retrieval systems (publishing of directories and databases, incl information providing services) • News agency activities

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[1] The UK creative industries include advertising, architecture, the art and antiques market, crafts, design, designer fashion, film and video, interactive leisure software, music, the performing arts, publishing, software and computer services, television and radio, but not distribution copyright industries.

RESEARCH METHODOLOGY (ONGOING)

- Green Discussion Paper on "Investing in Cultural Capital – A New Agenda for a Creative and Connected Nation" drafted by Cultural Agenda Taskforce comprising representatives from MITA, STB, EDB, MOM in March 2002

- Cultural Capital Study Mission led by Dr Tan Chin Nam, PS (MITA) to Hong Kong, United States and United Kingdom on 5 – 16 April 2002

- MITA & Partners International Advisory Programme on "Developing a Creative and Connected Singapore" on 29 – 30 April 2002
  - A 2-day strategic brainstorming session attended by 24 participating agencies: MITA, IDA, NAC, NHB, NLB, SBA, MTI, EDB, IE Singapore, JTC Corporation, SPRING Singapore, STB, MOE, LASALLE-SIA, NAFA, NP, NYP, SP, TP, NTU, NUS, MOM, PA, and URA.
  - The IAP featured the following Distinguished Advisers:- Professor Anthony Jones, President of the School of the Art Institute of Chicago, Professor Lo King-man, Director of the Hong Kong Academy of Performing Arts, Professor Ken Robinson, Senior Adviser to the President of the J. Paul Getty Trust and Mr Arnold Wasserman, Senior Fellow of The Idea Factory.

- Creative Roundtable Discussions with creative personalities (11 February 2002 and 20 February 2002), economic agencies (13 March 2002, 18 May 2002 and 8 July 2002), Singapore Business Federation Council (1 July 2002), real estate developers (14 March 2002, 12 July 2002).

- Institute of Policy Studies Closed Door Discussion on Cultural Capital on 25 July 2002

- Networked Government Forum on "Cracking the Creative Genome – Ideas & Application for a Creative Singapore" on 10 September 2002

DESIGN

- Design Study Mission led by Mr Choo Thiam Siew, CEO (NAC) to Spain, Italy, Germany, Denmark, Finland and United Kingdom on 8 – 26 May 2002

- Design Study Mission led by Mr Khor Kok Wah, Dy CEO (NAC) to Hong Kong on 13-17 September 2002

- International Consultation with design experts
  - The international experts interviewed included Dr Peter Zec, President of Design Zentrum (Germany); Mr Andrew Summers, CEO of UK Design Council; Mr Earl Powell, President of Design Management Institute (USA), Ms Julia Chiu, Director of Nagoya International Design Centre (Japan); Dr Chung Kyong-Won, President & CEO of the Korea Institute of Design Promotion.

- On-going Industry Consultation with professional and industry associations

- Design Roundtables on 14 March, 15 July and 26 August with the Singapore Business Federation, design-centric enterprises, designers and educational institutions.

MEDIA

- Broadcast 21 report prepared by SBA after 6 months of industry consultation (completed in December 2001)

- PriceWaterhouseCoopers consultancy study for the Singapore Film Commission in May 2001

- Media Industry Roundtable in May 2002 comprising 20 captains of the film, broadcasting, satellite and publishing industries

- International Advisory Programme on Media on 17 June 2002
  - The following Distinguished Advisers were featured: Mr Raymond Chow, Chairman of Golden Harvest, Dr Lee Yong-Teh, Chairman of Trigem Computer Inc, Mr Paul Saffo, Director and Roy Amara Fellow of The Institute For the Future and Mr Richard Taylor, Co-Founder, Director and Special Effects Designer of WETA Workshop. Special Guests included Mr John Kao, Chief Executive Officer, Kao Ventures and Mr Sim Wong Hoo, Chief Executive Officer, Creative Technologies

ERC SERVICES SUBCOMMITTEE
CREATIVE INDUSTRIES WORKING GROUP

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Media 21 Initiative Leader:
Mr Lim Hock Chuan   Chief Executive Officer, Singapore Broadcasting Authority

Design Singapore Taskforce Leader:
Assoc Prof Milton Tan   MITA Fellow, Ministry of Information, Communications & the Arts

Renaissance City 2.0 Project Manager:
Mr Khor Kok Wah   Director (Arts & Heritage Development Division), Ministry of Information, Communications & the Arts

INTERNATIONAL DISTINGUISHED ADVISERS

International Advisory Programme on a Creative & Connected Singapore
Prof Anthony Jones   President, School of the Art Institute of Chicago
Prof Lo King-Man   Director, Hong Kong Academy for Performing Arts
Prof Ken Robinson   Senior Adviser to the President of J. Paul Getty Trust
Mr Arnold Wasserman   Senior Fellow, The Idea Factory
                           Founder, heu-ris-tic

International Advisory Programme on Media
Mr Raymond Chow   Chairman, Golden Harvest
Dr Lee Yong-Teh   Chairman, Trigem Computer Inc
Mr Paul Saffo   Director & Roy Amara Fellow, Institute for the Future
Mr Richard Taylor   Co-Founder, Director & Special Effects Designer of WETA Workshop

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With Inputs & Support from:

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Arts & Entertainment Section, Singapore Tourism Board

<u>Individuals:</u>

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Ms Gwendolene Lim	Manager (PR Academy), Ministry of Information, Communications & the Arts
Ms Ngiam Shing Shian	Corporate Planning Officer, Ministry of Information, Communications & the Arts
Mr Poh Kok Hong	Corporate Planning Officer, Ministry of Information, Communications & the Arts
Mr Feisal Bin Abdul Rahman	Arts & Heritage Officer, Ministry of Information, Communications & the Arts
Ms Yeow Ju Li	Assistant Director (Arts & Entertainment), Singapore Tourism Board
Ms Lilia Yip	Programmes Officer

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Mr Lim Siam Kim	Chief Executive Officer, National Heritage Board

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Mr Khor Kok Wah	Director (Arts & Heritage Development Division), Ministry of Information, Communications and the Arts
Mr Kwok Kian Chow	Director (Singapore Art Museum), National Heritage Board
Mr Yew Sung Pei	Director (Business Capability Division), International Enterprise Singapore
Ms Choy Sauk Kook	Director (Domestic Commerce & Services Division), Standards, Productivity and Innovation Board
Mr Gerald Goh	Deputy Director (Electronics & Precision Engrg Cluster), Economic Development Board

Secretariat:

Mr Teo Kian Giap	Deputy Director (Strategic Development), National Arts Council
Mr Yuen Kum Cheong	Senior Assistant Director (Strategic Development), National Arts Council
Ms Yvonne Tham	Assistant Director (Arts & Design), Ministry of Information, Communications and the Arts
Mr Feisal Abdul Rahman	Arts & Heritage Development Officer (Arts & Heritage Development), Ministry of Information, Communications and the Arts
Ms Esther Song	Arts Administrator (Strategic Development), National Arts Council

Education Advisory (as of Sept 02):

Dr Alan Rubenstein	Vice President, LASALLE-SIA College of the Arts
Mr Gunalan Nadarajan	Dean, Faculty of Visual Arts, LASALLE-SIA College of the Arts
Dr Thelma Lazo-Flores	Head, School of Design, LASALLE-SIA College of the Arts
Ms Gladys Theng	Director, School of Fashion Studies, Nanyang Academy of Fine Arts
Dr Chew Kim Liong	Director, School of Visual Arts, Nanyang Academy of Fine Arts
Mr Lim Cheng Ton	Principal & Chief Executive Officer, Nanyang Polytechnic
Mr Lam Chow Yen	Director, School of Design, Nanyang Polytechnic
Prof Edwin Thumboo	Chairman/Director, Centre for the Arts, National University of Singapore
Mr Tan Hong San	Executive Director, Design Technology Institute, National University of Singapore
A/P Heng Chye Kiang	Acting Head, Dept of Architecture, National University of Singapore
Dr Ho Kah Leong	Principal, Nanyang Academy of Fine Arts
Dr Victor Valbeuna	Director, School of Film & Media Studies, Ngee Ann Polytechnic
Mr Ang Keng Loo	Deputy Principal, Temasek Polytechnic
Mr Alistair Leung	Director, Design School, Temasek Polytechnic

Industry Advisory (as of Sept 02):

Industry/Business

Mr Eric Berthier	Managing Director, Daiichi Media Pte Ltd
Mr Edwin Beck	Vice President, GE Fitch Singapore Pte Ltd
Mr James Chia	President, PICO Art international Pte Ltd
Mr David Chin	Executive Director, Singapore Business Federation
Mr Philip Ng	Chief Executive Officer, Far East Organisation Pte Ltd
Mr Simon Ong	Managing Director, Kingsmen International Pte Ltd
Mr Graham Perkins	Creative Markets Manager, Apple Computer Ltd
Dr Ron Sim	Chairman & Chief Executive Officer, OSIM International Ltd
Mr Philip Wee	General Manager, IKEA Singapore Pte Ltd
Ms Jessie Yong	Senior Vice President (Marketing & Leasing), CapitaLand Commercial Ltd
BG (NS) Philip Su	Assistant Chief Executive Officer, JTC Corporation

Visual Communications Design

Mr Kim Chun Wei	Managing Director, Ukulele Design Consultants
Mr Nigel Smith	Managing Director, DIA Brand Consultants & President, Designers Association Singapore
Mr Tan Beng Seng	Managing Director, Onion Design Pte Ltd
Mr Tham Khai Meng	Regional Creative Director, Ogilvy & Mather Worldwide
Ms Su Yeang	Chief Executive, Citigate Su Yeang

Environment Design

Ms Constance Ann	President, Society of Interior Designers Singapore
Mr Rajesh Shah	Vice-President, Society of Interior Designers Singapore
Mr Gan Eng Oon	Executive Chairman, DP Architects
Mr Derek Mackenzie	Partner, Design Phase
Mr Geoff Malone	Partner, Geoff Malone International
Mr Lars Pertwee	Honorary Secretary, Singapore Institute of Landscape Architects
Mr Nicholas Smith	Honorary Secretary, Society for Interior Designers Singapore
Mr George Budiman	Honorary Treasurer, Society for Interior Designers Singapore
Mr Henry Steed	Director, Studio Steed
Mr John Ting	President, Singapore Institute of Architects

Product & Industrial Design

Mr Patrick Chia	Designer, Squeeze Design

Mr Benny Ong	Director, Verandah Enterprises
Mr Peer Sathikh	Managing Director, Inovasia Design Pte Ltd
Mr Ulrich Schraudolph	Head Industrial/Mechanical Design, PSB Corporation
Mr Edward Tonino	Director, Philips Design

International Advisory (as of Sept 02):

Mr Arnold Wasserman	Senior Fellow, The Idea Factory & Founder, heu-ris-tic
Prof Anthony Jones	President, School of the Art Institute of Chicago
Mr Earl Powell	President, Design Management Institute, USA
Mr Andrew Summers	Chief Executive Officer, UK Design Council

MEDIA 21 TASKFORCE

Project Leader:

| Mr Lim Hock Chuan | Chief Executive Officer, Singapore Broadcasting Authority |

Media 21 Industry Roundtable Members:

Mr Frank Brown	President, MTV Asia LDC
Mr Henry H. L. Cheong	Regional Business Development Director, NTL
Mr Anthony Chia	Vice President (Strategic Planning & Policy), MediaCorp Group
Mr Eric Khoo	Chief Executive Officer, Zhao Wei Films Pte Ltd
Prof Eddie Kuo	Dean, Singapore of Communication & Information, Nanyang Technological University
Mr Lai Seck Khui	Chief Executive Officer, Times Publishing Limited
Mr Lee Cheok Yew	Chief Executive Officer, SPH MediaWorks Limited
Mr Kenneth Liang	Chief Executive, Dream Forest Productions Pte Ltd
Ms Doreen Liu	Managing Director, World Scientific Publishing Co. Pte Ltd
Mr Neville Meijers	Executive Vice President & Managing Director, Discovery Asia, Inc
Mr Raymund T. Miranda	Managing Director, Disney Channel-Asia Walt Disney Television (S'pore) Pte Ltd
Prof Kenneth Ong	Lecturer (School of Engineering), National University of Singapore & Member, National Digital TV Committee
Mr Viswa Sadasivan	Chairman & Chief Executive Officer, The Right Angle Media Pte Ltd
Mr Harold Shaw	Shaw Organisation Group of Companies
Prof Bernard Tan	Dean of Students, National University of Singapore Chairman, National Internet Advisory Committee Board Member, National Arts Council
Ms Joyce Tan	Executive Director, National Book Development Council of Singapore
Mr Harrie Tholen	General Manager (Asia Pacific), Philips Electronics Singapore Pte Ltd
Mr Wong Heang Fine	President & Chief Executive Officer, Cathay Organisation Holdings Ltd
Mr Andrew Yap	Executive Vice Chairman, Intertainer (Asia) Pte Ltd
Mr Daniel Yun	Chief Executive Officer, Raintree Pictures Pte Ltd

Secretariat:

Ms Valerie Cheng	Deputy Director (HR & Corporate Planning), Singapore Broadcasting Authority
Ms Heng Li Lang	Head (Research), Singapore Broadcasting Authority
Ms T Yuvarani	Assistant Director (Strategic Planning), Singapore Broadcasting Authority
Ms Keh Li Ling	Assistant Director (Industry Development), Singapore Broadcasting Authority
Ms Samantha Loh	Assistant Director (Public Service Broadcast), Singapore Broadcasting Authority

Creative Individuals:

Mr Bill Ang	Managing Director, Generator Creative
Mr Glen Goei	Actor-Director
Mr Ivan Heng	Artistic Director, Wild Rice Productions
Mr Peter Kellock	Founder & Chief Executive Officer, Muvee Technologies
Mr Aun Koh	Editorial Director, Gnomadic Publishing Pte Ltd
Mr Gaurav Kripalani	Artistic Director / Managing Director, The Singapore Repertory Theatre
Ms Melissa Kwee	SRT Board of Directors & Director (Development), United World College of Southeast Asia
Ms Helene Larivee	Executive Producer (Carnival), Esplanade – Theatres on the Bay
Mr Paul Lincoln	Lecturer, School of Multi-Media Art, LASALLE-SIA College of the Arts
Mr Low Eng Teong	Senior Curriculum Specialist (Arts & Crafts), Ministry of Education
Mr Arun Mahizhnan	Deputy Director, Institute of Policy Studies
Mr Mok Wei Wei	Managing Director and Architect, William Lim Associates Pte Ltd
Ms Vera Ong	Co-Owner of Art-2 Gallery Pte Ltd & Founding Member of Galleries Association (Singapore)
Mr Peter Schoppert	Deputy Director, Business Ventures, NUS Enterprise (Singapore) & Co-founder of Asiacontent.com
Mr Alan Seah	Creative Director, Generator Creative
Ms Seow Sher Yen	General Manager, The Substation
Mr Julian Stone	Senior Lecturer, School of Design, LASALLE-SIA College of the Arts
Mr Alvin Tan	Artistic Director, The Necessary Stage
Mr David Tan	Director, International Talent Division, Ministry of Manpower
Ms Jennifer Tham	Choral Conductor (Singapore Youth Choir) / Young Musicians Society
Ms Winnifred Wong	Managing Director, Ethos Books

Singapore Business Federation (SBF):

Mr Stephen Lee	Chairman, SBF President, Singapore National Employers Federation Managing Director, Great Malaysia Textile Manufacturing Company Pte Ltd
Mr Cheng Wai Keung	Honorary Secretary, SBF Council Chairman & Managing Director, Wing Tai Holdings Limited
Mr Willie Cheng	Deputy Honorary Secretary, SBF Council Chairman, Singapore Information Technology Federation (SITF) Country Managing Director, Accenture Pte Ltd
Mr Philip W. Forrest	SBF Council Member President, Australian Chamber of Commerce (AustCham) Managing Director, Omega Performance Corporation
Mr Landis Hicks	SBF Council Member Chairman, American Chamber of Commerce (AmCham) Managing Director, PAE Singapore Pte Ltd
Mr David Chin	Executive Director, SBF
Mr Koh Juan Kiat	Executive Director, SBF
Mr Ooi Sin Teik	Deputy President, OCBC Bank

Prof Tommy Koh	Director, The Institute of Policy Studies
Mr Arun Mahizhnan	Deputy Director, The Institute of Policy Studies
Mr T Sasitharan	Co-Director, Practice Performing Arts School
Dr Robert Liew	Founder and Managing Director, Arts Management Associates
Mr Cherian George	Visiting Fellow, The Institute of Policy Studies
Mr Goh Eck Kheng	Publisher, Landmark Books Pte Ltd
Mr Noor Effendy Ibrahim	Artistic Director, Teater Ekamatra
Mr Philip Jeyaretnam	Writer
Mr Eric Khoo	Director, Zhao Wei Films
Mr Gaurav Kripalani	Managing Director / Artistic Director, Singapore Repertory Theatre
Ms Mary Loh	Senior Marketing Consultant, Empire M+C Consultants Pte Ltd
Ms Traslin Ong	Manager (Singapore Wing), TheatreWorks (S) Ltd
Mr Gunalan Nadarajan	Dean, Faculty of Visual Arts, Lasalle-SIA College of the Arts
Mr Venka Purushothaman	Senior Lecturer, Dept of Arts Management, Lasalle-SIA College of the Arts
Mr Henry Tan	Manager (Planning Unit) & Deputy Principal (Academic Planning Office), Ngee Ann Polytechnic
Ms Audrey Wong	Artistic Co-Director, The Substation

INTERNATIONAL ADVISORY PROGRAMMES

Chairman:

Mr David Lim	Acting Minister for Information, Communications & the Arts

Host Agency:

Ministry of Information, Communications & the Arts

Mr Khaw Boon Wan	Senior Minister of State
Mr Yatiman Yusof	Senior Parliamentary Secretary
Dr Tan Chin Nam	Permanent Secretary
Mr Choo Whatt Bin	Deputy Secretary (Information & the Arts)
Mr Mohd Ali Baksh	Director, Public Communications Division
Dr Choong May Ling	Director, Infocomms & Media Development Division
Mr Khor Kok Wah	Director, Arts & Heritage Development Division
Dr Ismail Sudderuddin	Director, National Resilience Division
Mr Tong Ming Shen	Director, Organisation Management Division

Partner Agencies:

Economic Development Board

Mr Ko Kheng Hwa	Managing Director
Mr Tan Chek Ming	Assistant Managing Director (Cluster Group 2)
Mr Chua Taik Him	Assistant Managing Director (Enterprise Ecosystem and Planning)
Ms Wong Wee Kim	Director, Planning
Ms Kerry Cheah	Senior Officer, Strategic Planning

Infocomms Development Authority

Mr Leong Keng Thai	Acting Chief Executive Officer
Ms Wu Choy Peng	Assistant Chief Executive Officer (Government Systems)
Mr Khoong Hock Yun	Assistant Chief Executive Officer (Infocomm Development Group)

International Enterprise Singapore
Mr Yew Sung Pei   Director, Capability Development Group
Mrs Tan Seok Lee   Director, Corporate Services Group
Mr Malcolm Tham   Deputy Director, Exhibition & Business Services

JTC Corporation
Mr Chong Lit Cheong   Chief Executive Officer
Mr Seah Kee Pok   Assistant Chief Executive Officer
BG Philip Su Poon Ghee   Assistant Chief Executive Officer

LASALLE-SIA College of the Arts
Dr Brian Howard   President
Mr Alan Rubenstein   Vice President
Mr Gunalan N   Dean, School of Visual Arts

Ministry of Education
Ms Ho Peng   Director, Education Programmes
Dr Koh Thiam Seng   Deputy Director, Higher Education
Mr Low Eng Teong   Curriculum Planning & Development Officer

Ministry of Manpower
Ms Elizabeth Quah   Divisional Director, Manpower Planning
Mr David Tan   Divisional Director, International Talent
Mr Foong Tze Foon   Director, Corporate Planning
Ms Kee Ee Wah   Assistant Director, Corporate Development

Ministry of Trade & Industry
Mr Heng Swee Keat   Permanent Secretary
Ms Geraldine Ong   Senior Assistant Director, Enterprise Division
Mr Kenneth Sim   Assistant Director, Enterprise Division
Ms Tong Yin   Assistant Director (Human Capital), Resource Division

Nanyang Academy of Fine Arts
Prof Yu Chun Yee   Vice Principal (Academic)
Dr Chew Kim Liong   Director, School of Visual Arts

Nanyang Polytechnic
Mr Lam Chow Yen   Director, School of Design
Mr Lim Sew Hua   Director, Planning
Mr Soon Tats Fah   Deputy Director, Product Design

Nanyang Technological University
Prof Er Meng Hwa   Deputy President 2 & Dean, College of Engineering
Prof Cheong Hee Kiat   Deputy President 3 & Dean, School of Civil & Environmental
                           Engineering

National Arts Council
Mr Choo Thiam Siew   Chief Executive Officer
Mr Teo Kian Giap   Deputy Director, Strategic Development
Ms Quek Yeng Yeng   Deputy Director, Facilities Development

National Heritage Board
Mr Lim Siam Kim   Chief Executive Officer
Mrs Lim Siok Peng   Deputy Executive Officer
Ms Teo Kai Lin   Senior Assistant Director, Strategic Planning & Organisational
                           Development

National Library Board
Dr Christopher Chia   Chief Executive
Ms Ngiah Lek Choh   Assistant Chief Executive
Ms Julie Sabaratnam   Director, Strategic Initiatives

National University of Singapore
Prof Edwin Thumboo   Director, Centre for the Arts
Prof Bernard Tan   Dean, School of Students Affairs
Dr Steven Baxter   Director, Singapore Conservatory of Music
Dr Ho Chee Kong   Associate Director, Singapore Conservatory of Music
Assoc Prof Milton Tan   Head, Department of Architecture

Ngee Ann Polytechnic
Mr Chia Mia Chiang   Principal
Mrs Pee See Hua   Director, School of Interdisciplinary Studies
Dr Victor Valbuena   Director, School of Film & Media Studies

People's Association
Mr Chia Tze Yee   Director, Office of Inter-Community Initiatives
Mr Dennis Seah   Director, Office of Cultural & Recreational Exchange
Ms Diana Lee   Assistant Director, Office of Inter-Community Initiatives

Singapore Broadcasting Authority
Mr Lim Hock Chuan   Chief Executive Officer
Mr Koh Tin Fook   Deputy Chief Executive Officer
Ms Ling Pek Ling   Director, Policy & Planning
Ms Amy Chua   Director, Programmes

Singapore Polytechnic
Mr Jeffrey Ho   Lecturer, School of Built Environment
Mrs Leong-Chan Nee Nee   Section Head, Language & Communication Department
Mrs Pearly Gan   Manager, Student & Alumni Affairs Department

Singapore Tourism Board
Mr Patrick Lau   Director, Lifestyle & Chief Information Officer
Ms Christine Khor   Deputy Director, Arts & Entertainment
Ms Yeow Ju Li   Assistant Director, Arts & Entertainment
Mr Oliver Chong   Assistant Director, Events Marketing

Standards, Productivity & Innovation Board
Mr Lee Suan Hiang   Chief Executive
Mr Freddy Soon   Deputy Chief Executive

Temasek Polytechnic
Mr Boo Kheng Hua   Principal
Mr Ang Keng Loo   Deputy Principal
Mr Alistair Leung   Director, Temasek Design School

Urban Redevelopment Authority
Mr Leong Teng Wui   Head, Urban Design
Ms Hwang Yu Ning   Head , Development Planning
Ms Ong May Anne   Head, Lifestyle Studies

Individual Guests:
Mr Edmund Cheng   Deputy Chairman, Wing Tai Holdings Ltd
Mr Darryl Dickens   Head of Group Communications, DBS Bank
Mr Kwee Liong Keng   Chairman of Singapore Art Museum & Managing Director, Pontiac Land
                            Pte Ltd
Dr Lai Ah Eng   Research Fellow, Institute of Policy Studies
Dr Robert Liew   Director, Arts Management Associates & Member of ERC Human Capital
                            Workgroup on Arts, Culture, Sports & Recreation
Mr Stephen Lee   Chairman, Singapore Business Federation
Mr Liu Thai Ker   Chairman, National Arts Council & Chairman of ERC Human Capital
                            Workgroup on Arts, Culture, Sports & Recreation
Ms Penny Low   MP (Pasir Ris-Punggol GRC) & Member of Government Parliamentary
                            Committee on Information, Communications & the Arts
Mr Arun Mahizhnan   Deputy Director, Institute of Policy Studies
Mr Ong Keng Sen   Artistic Director, TheatreWorks (S) Ltd
Ms Irene Ng   MP (Tampines GRC) & Member of Remaking Singapore Subcommittee on
                            Beyond Credit Card
Mr Philip Ng   Chairman of Sentosa Development Corporation & Chief Executive Officer
                            of Far East Organisation
Mr Zainudin Nordin   MP (Bishan-Toa Payoh GRC) & Member of Government Parliamentary
                            Committee on Information, Communications & the Arts
Mr Philippe Paillart   Chief Executive Officer, DBS Bank
Mr Benson Puah   Chief Executive Officer, The Esplanade Co Ltd
Mr T. Sasitharan   Co-Director, Practice Performing Arts
Mr Tan Swie Hian   Artist

Mr Tham Khai Meng	Regional Creative Director, Ogilvy & Mather (S) Pte Ltd & Member of ERC Human Capital Workgroup on Arts, Culture, Sports & Recreation
Mr Andrew Tjioe	President, Tung Lok Group
Mr Robin Tomlin	Vice Chairman (South Asia), UBS Warburg

<mark>INTERNATIONAL ADVISORY PROGRAMME ON MEDIA ON 17 JUNE 2002</mark>

Chairman:

| Dr Tan Chin Nam | Chairman, Singapore Broadcasting Authority & Permanent Secretary, Ministry of Information, Communications & the Arts |

Lead Agency:

Singapore Broadcasting Authority

Mr Lim Hock Chuan	Chief Executive Officer
Mr Koh Tin Fook	Deputy Chief Executive Officer
Ms Amy Chua	Director, Programmes
Mr Tow Joon Lai	Director, Corporate Services
Mr Liu Tsun Kie	Member, SBA Board
Ms Heng Li Lang	Head, Research / Assistant Director, Industry Promotion

Co-organising Agencies:

Economic Development Board

Mr Ko Kheng Hwa	Managing Director
Ms Linda Sein	Deputy Director, Infocomms & Media
Ms Jacqueline Tan	Head, Specialist Information & Publishing/Printing

JTC Corporation

| Mr Arthur Aw | Deputy Director, One North Development Committee |

Ministry of Information, Communications & the Arts

Mr David Lim	Acting Minister
Mr Choo Whatt Bin	Deputy Secretary (Information & the Arts)
Mrs Tan Ching Yee	Designate Deputy Secretary (Infocomms & Media)
Dr Ismail Sudderuddin	Director, National Resilience Division & Director (Secretariat), Singapore Film Commission
Mr Woon Wee Jai	Co-Director, Public Communications Division
Mdm Yeong Yoon Ying	Director, Media Relations Division
Ms Lee Hwee Hong	Director, National Marketing Department
Mr Ng Cher Pong	Deputy Director, Infocomms & Media Development
Mr Ng Chun Pin	Assistant Director (Content Unit)
Ms Toh Kai Ling	Assistant Director (Corporate Development)

Participating Agencies:

Infocomm Development Authority of Singapore

Mr Khoong Hock Yun	Assistant Chief Executive Officer (Infocomm Development Group)
Mr Daneel Pang	Deputy Director, Content Development
Mr Michael Fung	Assistant Director, Content Development

Ministry of Manpower

| Mr Foong Tze Foon | Director, Corporate Planning |

Ministry of Trade and Industry

| Mr Ng Wai Choong | Director, Industry Development |

National Arts Council

| Ms Stacey Tan | Director, Artists Development |

<u>National Heritage Board</u>
Mr Lim Siam Kim   Chief Executive Officer

<u>National Library Board</u>
Dr Christopher Chia   Chief Executive

<u>Singapore Tourism Board</u>
Mr Yeo Khee Leng   Chief Executive
Ms Christine Khor   Deputy Director, Arts & Entertainment

Special Guests:
Mr John Kao   Chief Executive Officer, Kao Ventures
Mr Sim Wong Hoo   Chief Executive Officer, Creative Technologies

Guests:
Mr Mohd Yussoff Ahmad   Managing Director, Communications 2000
Mr P. N. Balji   Chief Executive Officer, MediaCorp Press
Mr Chris Batson   Managing Director, Sunrise Entertainment
Mr Frank Brown   President, MTV Asia LDC
Mr Paul Brown-Kenyon   Associate Principal, McKinsey & Co
Mr Anthony Chia   Chief Executive Officer, MediaCorp Technologies
Mr Rik Dovey   Chief Executive Officer, ESPN STAR Sports
Mr Jamal Hj Ismail   Managing Director, IMO Productions
Mr Lee Cheok Yew   Chief Executive Officer, SPH MediaWorks Limited
Mr Liu Thai Ker   Chairman, Censorship Review Committee (CRC)
                             Director, RSP Architects, Planners & Engineers
Mr Henry Cheong   Regional Business Development Director, National Transcommunication
                             Ltd
Mr Goh Min Yen   Head, Eng Wah Organisation
Mr Lee Chang Yong   Managing Director, Film Formations
Mr Lim Su Aik   Director, Oak 3 Films
Mr Kenneth Liang   Chief Executive, Dream Forest Productions Pte Ltd
Prof Lye Kin Mun   Chief Executive Officer, Institute for Communications Research
Mr Neville Meijers   Executive Vice President & Managing Director, Discovery Asia, Inc
Mr Farrell Meisel   Chief Operating Officer, MediaCorp
Mr Jack Neo   Director, J-Team Productions
Mr Ng Boon Khee   President & Chief Executive Officer, Silicon Illusions
Assoc Prof Kenneth Ong   Lecturer, Dept of Electrical & Computing, National University of Singapore
Mr Edmund Ooi   Chief Executive Officer, 7G Studio
Mr C. K. Phoon   Managing Director, Golden Harvest Multiplex
Mr Viswa Sadasivan   Chairman & Chief Executive Officer, The Right Angle Media Pte Ltd
Prof Bernard Tan   Dean of Students, National University of Singapore
                             Chairman, National Internet Advisory Committee
                             Board Member, National Arts Council
Ms Elsa Tan   General Manager & Publisher (General & Reference) & Corporate General
                             Manager (Corporate Marketing & Publishing Devt), Times Publishing
Mr Kenneth Tan   Chairman, Singapore Film Society
Dr Victor Valbuena   Head, Film & Media Studies, Ngee Ann Polytechnic
Mr Wong Heang Fine   President & Chief Executive Officer, Cathay Organisation Holdings Ltd
Mr Andrew Yap   Executive Vice Chairman, Intertainer (Asia) Pte Ltd
Mr Galen Yeo   Executive Director, The Moving Visuals Company
Mr Daniel Yun   Chief Executive Officer, Raintree Pictures Pte Ltd

STUDY MISSIONS

Listed below are the names of the organisations and key individuals met during the various study missions.

<mark>**CULTURAL CAPITAL STUDY MISSION (5 – 16 APRIL 2002)**</mark>

Hong Kong

Organisations:
Home Affairs Bureau
Land & Planning Bureau

Individuals:
Mr Michael Cheung	Director of Education
Mr Raymond Chow	Chairman, Golden Harvest
Mr Victor Chu	Chairman, First Eastern Investment Group
Mr Lam Woon Kwong	Secretary for Home Affairs
Prof Lo King-Man	Director, Hong Kong Academy of Performing Arts

United Kingdom

Organisations:
Design Museum
Royal College of Art
Tate Modern

Individuals:
Ms Ann Bridgewood	Acting Deputy Executive Director for Research & Planning, Arts Council
Ms Julia Cleverdon	Chief Executive, Business in the Community
Prof Charles Handy	Writer, consultant and educator
Mrs Elizabeth Handy	Photographer
Mr Michael Helston	Head of International Unit, Department of Culture, Media & Sports
Ms Sandra Holtby	Head, London College of Fashion
Ms Janet Morrison	Deputy Chief Executive, NESTA
Mr Geoff Mulgan	Director of Performance and Innovation Unit, UK Cabinet Office
Prof Paul Robertson	Leader of the Medici Quartet
Mr Michael Seeny	Head of Media Group, Department of Culture, Media & Sports
Mr Andrew Senior	Head Creative Industries, The British Council
Mr Andrew Summers	Chief Executive, Design Council
Mr Colin Tweedy	Chief Executive, Arts & Business
Mr Chris Wainwright	Dean, Central Saint Martins College of Art & Design
Mr Peter Wilson	Director, Projects & Estates, Tate Modern
Mr Andrew Yates	Dean, Chelsea College of Art & Design

United States

Organisations:
The Creative Economy Initiative, New England Council
Design Management Institute
Guggenheim Museum
Rhode Island School of Design
Yale School of Drama

Individuals:
Prof Ruzena Bajcsy	Director of Centre for IT in the Interest of Society, University of California Berkeley
Prof John Canny	Head of Institute of Design, University of California Berkeley
Mr Roddy Carr	Director, Tourism Division, IMG
Prof Howard Gardner	Hobbs Professor of Cognition & Education, Harvard Graduate School of

	Education
Mr Rich Gold	Consultant
Prof José A. Gómez-Ibáñez	Derek C. Bok Professor of Public Policy & Urban Planning, Harvard Graduate School of Design & John F. Kennedy School of Government
Prof Rosabeth Moss Kanter	Ernest L. Arbuckle Professor of Business Adminstration, Harvard Business School
Dr John Kao	Chief Executive Officer, Kao Ventures
Mr Michael Keller	Stanford University Librarian
Prof David Kelley	Founder and Chief Executive Officer of IDEO Product Development & Professor of Product Design at Stanford University
Mr Thomas Krens	Director, Guggenheim Museums
Prof Alex Krieger	Chairman of Department of Urban Planning & Design, Harvard School of Design
Mr Hael Kobayashi	Director of Digital Artists Production, Industrial Light and Magic
Mr Peter Lawrence	Chairman, Corporate Design Foundation
Mr Kishore Mahbubani	Permanent Representative, Permanent Mission of Singapore to the United Nations – New York
Prof Lou Marinoff	Professor of Philosophy President of American Philosophical Practitioners Association
Prof William Mitchell	Dean, MIT School of Architecture & Planning
Mr Roger Nierenberg	Symphony Conductor
Mr Earl Powell	President, Design Management Instutute
Mr Paul Saffo	Director, Institute for the Future
Mrs Beau Takahara	Director, Groundzero
Prof Gerald Zaltman	Joseph C. Wilson Professor of Business Administration, Harvard Business School
Mr Benjamin Zander	Conductor, Boston Philharmonic Orchestra

<mark>DESIGN STUDY MISSION (8 – 26 MAY 2002)</mark>

Denmark
Dansk Design Council (Danish Design Council)
Danmarks Designskole (Danish School of Art and Design)
Danish Royal Academy of Fine Arts
Danish Secretariat for International Cultural Affairs – Ministry of Culture & Ministry of Foreign Affairs
Danish Trade Council – Ministry of Foreign Affairs
Ministry of Trade & Industry

Finland
Design Forum Finland
Museum of Art & Design Helsinki
Finland Design Roundtable
Finland Design Council
Museum of Contemporary Art Kiasma
University of Art & Design Helsinki (UIAH)
Creative Industries Management Ltd

Germany
Verband Beutscher Industriae-Designer (German Association of Industrial Designers)
Design Zentrum Nordrhein Westfalen (Design Centre)
Rat für Formgebung (German Design Council)
Museum für Angewandte Kunst (Museum of Applied Art)

Italy
Associazione per il Disegno Industriale (Association of Industrial Design)
Camera Nazionale della Moda Italiana (National Chamber of Italian Fashion)
Triennale di Milano

Instituto Europeo di Design (European Institute of Design)
Spain
Barcelone Centre de Disseny (Barcelona Design Centre]
Assiació de Disseny Industrial del Forment de les Arts Decoratives (Association of Industrial Designers)
Design for the World
Escola Elisava
Department de Culture, Direcció General de Promoció Cultural (Department of Culture, Catalonia (Generalitat de Catalunya))
J. Tresserra S.L.
Bd Barcelona 1972 S.L.

United Kingdom
UK Design Council
Design Business Association
British Brands Group
Design Museum UK
Central Saint Martins College of Art & Design
Royal College of Art
Seymour Powell
Wolff Olins
Foster & Partners
Marc Newson Ltd

<mark>**MEDIA 21 STUDY VISITS**</mark>

Canada
Banff TV Festival

Dubai
Dubai Media City
CNN
Reuters
Middle East Broadcasting Corporation

Europe
Enterprises
BBC, London
Film Commission, London
Vivendi-Universal Subsidiaries (Canal+ Technologies, Canal Satellite), Paris
NTL Broadcast, London
Broadband Bananas, London
Open TV & Static 2358, London
Kingston Communications, London
British Telecom – Broadcast, London
dktv (different kind of tv) Home Choice & Video Networks, London
Two Way TV Ltd, London
Nokia & Intellect, London

Regulators
Conseil Superieur De I'Audiovisuel (CSA), Paris
Independent Television Commission (ITC), London
Office of Telecommunications (OFTEL), London
Department of Trade & Industry (DTI), London
European Commission (EC), Brussels

Hong Kong
Hong Kong International Film and TV Mart

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WORLD ECONOMIC FORUM GLOBAL COMPETITIVENESS REPORT 2001-02

10.05 Uniqueness of product designs

Product designs are: (1 = copied or licensed from abroad, 7 = developed locally)

RANK	COUNTRY	SCORE
1	Finland	6.3
2	Germany	6.0
3	Denmark	6.0
4	Sweden	6.0
5	United States	5.9
6	Japan	5.9
7	France	5.9
8	Italy	5.9
9	Switzerland	5.7
10	Netherlands	5.6
11	Austria	5.4
12	Israel	5.3
13	United Kingdom	5.3
14	Norway	5.2
15	Belgium	5.1
16	Spain	4.9
17	Canada	4.9
18	Russian Federation	4.8
19	New Zealand	4.8
20	Jamaica	4.8
21	Iceland	4.8
22	Ireland	4.6
23	Latvia	4.6
24	Slovenia	4.5
25	Taiwan	4.5
26	Estonia	4.4
27	Australia	4.4
28	Czech Republic	4.4
29	Lithuania	4.4
30	Korea	4.3
31	South Africa	4.2
32	China	4.1
33	Trinidad and Tobago	4.1
34	Singapore	4.0
35	Bulgaria	4.0
36	Mauritius	4.0
37	Hong Kong SAR	4.0
38	Poland	3.9
39	Colombia	3.9
40	Uruguay	3.8

MEAN: 4.2

10.04 Capacity for innovation

Companies obtain technology: (1 = exclusively from foreign companies, 7 = by pioneering their own new products or processes)

RANK	COUNTRY	SCORE
1	Finland	6.4
2	United States	5.9
3	Japan	5.9
4	France	5.9
5	Sweden	5.8
6	Israel	5.7
7	Germany	5.7
8	Switzerland	5.7
9	Netherlands	5.5
10	Denmark	5.5
11	United Kingdom	5.1
12	Italy	5.1
13	Austria	5.1
14	Belgium	4.8
15	New Zealand	4.7
16	Canada	4.7
17	Norway	4.7
18	Iceland	4.7
19	Spain	4.7
20	China	4.5
21	Ireland	4.5
22	Korea	4.4
23	Australia	4.4
24	Russian Federation	4.3
25	Slovenia	4.3
26	Singapore	4.2
27	Taiwan	4.2
28	South Africa	4.1
29	Ukraine	4.1
30	Costa Rica	3.9

MEAN: 3.8

10.03 Extent of branding

Companies that sell internationally: (1 = sell commodities or market under foreign brands, 7 = have developed their own international brands)

RANK	COUNTRY	SCORE
1	Switzerland	6.4
2	Japan	6.4
3	Germany	6.3
4	Finland	6.3
5	United States	6.2
6	United Kingdom	6.2
7	France	6.1
8	Italy	6.1
9	Sweden	6.0
10	Netherlands	5.9
11	Denmark	5.9
12	Austria	5.4
13	Iceland	5.4
14	Jamaica	5.4
15	Spain	5.3
16	Ireland	5.2
17	Israel	5.1
18	New Zealand	5.1
19	Norway	4.9
20	Belgium	4.8
21	Canada	4.7
22	Korea	4.6
23	Singapore	4.5
24	Russian Federation	4.4
25	China	4.3
26	South Africa	4.3
27	Dominican Republic	4.2
28	Hong Kong SAR	4.2
29	Trinidad and Tobago	4.2
30	Uruguay	4.1

MEAN: 4.2

"DESIGN SINGAPORE" INITIATIVE
SUMMARY TABLE OF PRELIMINARY STRATEGIES & RECOMMENDATIONS

Strategic Outcomes:

- **A Leading Centre for Contemporary Design in Asia**
- **A Distinctive Singapore Design and Brand Identity**
- **A Competitive Advantage for Businesses**
- **A Pervasive Design Culture**

Strategy 1: Integrate Design in Enterprise

Catalyse the Integration of Design in Enterprise	▪ Identify and Develop iconic Singapore products and services in select industries where we have existing strengths to jumpstart design innovation in business ▪ Public Sector to lead by example in the use of effective design (in the design of public buildings, amenities, services) so as to nurture local design expertise and demand
Resources to Promote the Integration of Design in Enterprise	▪ Develop regular case studies, statistical analysis, global benchmarks, and surveys as key resources to promote the significance and use of design excellence to businesses, esp. SMEs ▪ Review existing assistance schemes for businesses (e.g. SEEDS, Research Incentive Scheme, TAP) to facilitate and encourage the use of design by businesses

Strategy 2: Develop a Vibrant & Professional Design Community

Build Expert Capabilities	▪ Establish Flagship School of Art, Media & Design with a regional and international outlook and close industry involvement at NUS-X, to provide degree courses & a professional development programme in fine arts, multimedia & design in collaboration with leading international design institutions ▪ Review design education at schools, polytechnics and specialised art schools with a view to enhancing the resources, raising the standard and developing areas of specialisation for the industry ▪ Establish design testbeds and research facilities to encouraging multidisciplinary research with industry, professionals and students (e.g. Media Lab Singapore)

Enhance Professional Standing and Development	▪ Develop quality standards to assess and validate the design profession and enable self-regulation by the design industries ▪ Develop new or existing design award to a prestigious annual national award to recognise design excellence in Singapore ▪ Develop continual professional development programme, in collaboration with IHLs

Strategy 3: Position Singapore as a Design Hub

National Champion for Design	▪ Establish the Singapore Design Council with the highest possible representation from the public sector, industry, design community and educational institutions, and an international advisory panel – to be the champion for design nationally and galvanise the design promotion efforts in the areas of enterprise, expertise and education; and to be the national design champion in the international arena and network
Inward Investment Promotion	▪ Anchor international design companies in Singapore, and in particular, the design HQ functions of leading MNCs – to build up the design industry and Singapore's reputation as a design hub ▪ Nurture local design industry ▪ Host international design events and awards in Singapore
Outward Promotion & Internationalisation	▪ Showcase Singapore designs and concepts at international platforms, such as world expos and fairs ▪ Promote Singapore designs, products and services in trade missions, exhibitions ▪ Synergise promotion of Singapore design, products & services with a national marketing and branding strategy to present a consistent and compelling story of the Singapore brand

Strategy 4: Foster a Design Culture and Awareness

Embed Design in Education	▪ Embed design concepts and use design as a creative thinking tool in the teaching of subjects such as business, engineering, art
Bring Design Everywhere	▪ Community Level: regular design exhibitions at museums and public spaces (libraries, malls etc) ▪ Specific Groups: organise workshops and exhibitions for targeted groups and issues, such as "Design in Education week" ▪ National Level: designate a "Design Singapore" Year to synergise with the national marketing and branding strategy
Design in Media	▪ Raise the profile the design profession/industry and effective designs at regular media platforms: newspapers, magazines, television programmes ▪ Cultivate specific journalists or media on design

POTENTIAL AREAS FOR DEVELOPMENT OF ICONIC DESIGNS

Design Capability:
- Ergonomic Design
- DFX (Design for X – Manufacturability, Assembly, Reliability, Functionality)
- Branding
- End-User Testing
- Human-Machine Interface
- Aesthetics

Vertical Market	Specific areas	Test-bedding in Singapore	Worldwide market size
Automotive	1. External and Internal Styling		US$800B (2001)
Infocomms & Media	1. Gaming 2. Software Design 3. Consumer Electronics		1. US$20B (2001), US$40B (2010) 2. US$97B (2002), US$114B (2010) 3. US$207B(2001), US$664B (2010)
Medical Technology	1. Medical Devices 2. Medical Equipment	Yes Yes	}US$169B in 2001, CAGR of }6%
Lifestyle Products & Services	1. White goods (domestic appliances) 2. Furniture 3. Luxury Items (jewelry, pens, watches..) 4. Hospitality, F&B, Retail 5. Fashion 6. Healthcare & Education Services		}Luxury Goods: US$68B in 2002 }(proxy) }
Materials	1. Building materials 2. Electronic materials 3. Biomedical materials	Yes Yes	No info.
Infrastructure	1. Plant & Process Design 2. Functional Systems (e.g. airport, port, intelligent buildings, transportation networks)	Yes	1. Plant & Process Design: US$500M (2002) 2. Airport Capital Expenditure:US$30B annually (2001 to 2005)
Food	1. Product & Process Design 2. Packaging		No info
Production systems			US$250B(2001), US$500B (2010)
Alternative Energy	1. Fuel cells 2. Photo-voltaics 3. Micro-turbines	Yes	}US$1B (2001), US$97B (2010) } }

SUMMARY OF TAX INCENTIVES IN AUSTRALIA, CANADA AND UNITED KINGDOM

AUSTRALIA

Tax Incentives	Key Criteria
(i) Division 10B: 100% deduction by copyright holders over two years commencing when the film is first used to derive income.	• Only applicable to films wholly or substantially made in Australia. The eligible film formats include feature films, documentary, mini-series, series, short drama, multimedia, promotional, variety, educational, training, and large format. • The application can be made at any time during the development or production process, and is generally made when investment funds are being raised.
(ii) Division 10BA: 100% accelerated deduction (deduction can be made in the same year of assessment).	• This is only applicable to "qualifying Australian films". To be an eligible Australian film, the film must be a feature film, telemovie, documentary or TV drama produced for exhibit in a cinema or on TV and be wholly or substantially made in Australia. If the film has a substantial non-Australian content, the Minister may refuse to certify that the film is substantially Australian.
(iii) Payroll tax exemptions or rebates representing 6% to 7% of local labour costs are available in three states.	• In Queensland: A minimum of AUD$3.5m for single project or bundling two or more projects up to AUD$5m is required. • In South Australia: To be eligible for the exemption, projects need to be produced wholly or substantially within the state, employ South Australian residents, and provide economic benefits to South Australia. • In New South Wales: The NSW Government has provided Fox Studios Australia with an incentive fund, in the form of payroll tax rebate, to attract production to Sydney and to shoot at the studios. This fund is administered by Fox Studios.
(iv) Film licensed Investment Companies (FLIC): Each Australian company (FLIC) will be licensed to raise a specific amount of concessional capital over a specific period for the purpose of investing in films and TV projects. FLIC Shareholders are eligible for upfront 100% tax deduction on the purpose of shares over that same period.	• Tax deduction does not apply to resale of shares. • A Selection Advisory Panel made up of film industry, finance and legal experts were appointed to assess applications .

**Summary of Tax Incentives in
Australia, Canada and United Kingdom**

UNITED KINGDOM

Tax Incentives	Key Criteria
(i) 100% write-off of expenditures on production and acquisition of films with budgets of less than £15million.	• This is only applicable to films that qualify as British Films under the Film Act of 1985. The criteria governing a British film relates to: the nationality of the film-maker; the percentage of the film's budget spent on production activity in the UK; and the percentage of labour costs payable to people ordinarily resident in the Commonwealth or the European Economic Area.
(ii) Sales and Lease schemes: UK taxpayer purchases the negative and copyright of a film, sets off the full cost against its tax bill, and then lease the film back for, say a 7-year period. The benefit for the vendor is that it receives a sum of between 5% and 10% of the sale price.	• Only producers and/or investors in a qualifying British film are allowed to rip the tax benefits for sales and leasebacks.

CANADA

Tax Incentives	Key Criteria
(i) Canadian Film or Video Production Tax Credit: For domestic productions: tax credit of up to 25% of Canadian labour costs	• Only Canadian film and television production companies across Canada can apply.
(ii) Canadian Film or Video Production Services Tax Credit: For foreign productions: tax credit of up to 11% of Canadian labour costs	• Only Canadian- or foreign-owned corporations primarily involved in film or video production or production services in Canada can apply.

SUMMARY OF FUNDING SCHEMES IN AUSTRALIA, CANADA AND UNITED KINGDOM

AUSTRALIA

Agencies	Key Schemes

Australian Film Finance Corporation Ltd (FFC).
Established in 1988.
 	
Annual grant of $50 million from Government, apportioned accordingly:
 	
a) 50-60% for feature films;
b) 30-40% for television drama;
c) 12-15% for documentaries.
	Criteria:
	• Producers/companies must possess the following :
	   • Individual producers must be Australian citizens or residents;
	   • Companies must be incorporated in Australia;
	   • Have Australian based central management and control;
	   • Have day to day management and control in the hands of Australians;
	   • Have majority Australian legal and economic ownership and Australian board membership;
	   • Control the development process.
	
	Project Criteria:
	• Projects must satisfy the following criteria to be eligible for funding:
	   • Eligible film will be either made wholly or substantially in Australia with significant Australian content;
	   • Have market attachments i.e in the form of free-to-air television licence fees, minimum guarantees against territories, or presales or advances against particular territories or rights.
	   • Equity investments are on a pro rata, first dollar recoupment basis. They must be accompanied by evidence of strong market support.
	   • Investment limits of not more than $4.5 million in any one television or feature film project in a financial year. The amount can be increased if there is an experienced creative team with strong marketplace attachment and first dollar recoupment.
	   • Amount of investment is based on recoupment value. This is based on revenue projections, taking into account proposed investment and recoupment structure, level of risk of marketplace attachments, genre of project,target audience, budget and experience of creative personnel.

**Table 2: Summary of Funding Schemes in
Australia, Canada and United Kingdom**

AUSTRALIA

Agencies	Key Schemes
Australian Film Commision (AFC) • Administers two funds: **a) Project Development Fund (PDF)** • available to outstanding feature, short feature, documentary, animation, interactive digital media, and television projects. • may be invested directly in a project, or indirectly through the support of a state of projects in the case of the General Development Investment Program. **b) Professional Development Programs (PDP)** • designed to provide opportunities for professional development of producers, directors, writers, animators and performers through production investment in outstanding features, short features, short films, documentatirs, animation, interactive digital media and tv projects. • all projects funded are low budget.	Criteria: • Projects must be defined as "Australian programs" which are determined according to nationality of principals, nationality of copyright holders, content and location of story, likely sources of production finance and likely location for the production and post production of project; • Applicants must be Australian citizens or permanent residents of Australia; • Applicant's track record in terms of the ability to finance projects, the commercial and critical success of those projects and the overall strength of application; • Quality,originality and creative ambition of the script; • Quality and rigor of supporting materials • Proposed financing strategy and viability of project; • Target audience potential

**Table 2: Summary of Funding Schemes in
Australia, Canada and United Kingdom**

CANADA

Agencies/Schemes	Key Criteria
Telefilm Canada (TC). Established 1967. TC administers the following funds: a) **Canada Feature Film Fund** (CFFF) Includes: • CFFF includes: • Screenwriting Assistance Program; • Low Budget Independent Feature Film Assistance Program; • Programs for Contemporary Activities; • Development, Production and Marketing Programs. CFFF begins operating 1 Apr 2001 Annual budget C$100m b) **Equity Investment Program (EIP)** of Canadian Television Fund (CTF) • With annual budget about C$230 million [Details see section on CTF below]	**CFFF** a) Eligible applicant must : • Be a Canadian-controlled corporation within meaning of Investment Canada Act; • Have Head office based in Canada and company's activities should take place in Canada; • Operate principally as feature film production or distribution entity; • Must be Canadian citizens or permanent residents within meaning of Immigration Act for individual producers and other key production personnel exercising financial control over project. b) Eligible projects must: • Be at least 75 minutes in length; • Be aimed primarily at Canadian theatrical market; • Be under Canadian ownership and under Canadian financial, distribution and creative control and for which rights and options necessary for the production are held by an eligible production company (with appropriate exceptions for international treaty co-productions); • Be eligible for certification as a "Canadian Production" pursuant to the criteria of Canadian Audio-Visual Certification Office, or satisfy definition of a Canadian program set out by CRTC; • Have Canadian scriptwriter and Canadian director; • Have Canadian performer in lead role; • Must have a commitment from an eligible Canadian distribution company for theatrical release in Canada within one year of delivery (exceptions are available for low budget productions); • Must no contain any element of serious or gratuitous sexual violence or exploitation; • Must have copyright beneficially owned by a Canadian.

CANADA

Agencies/Schemes	Key Criteria

Canadian Television Fund (CTF)
• Public-private initiative between Dept of Canadian Heritage, Cable Production and Telefilm Canada
• Consists of 2 distinct, yet complementary programs:
 	
a) **Equity Investment Program (EIP)**, administered by Telefilm Canada;
b) **Licence Fee Program (LFP)**, administered by CTF.
 	
• Annual budget close to C$230 million a year, with $130m for LFP and $100m for EIP.
	Criteria for EIP and LFP:
	Eligible Applicants must:
	• Canadian-controlled corporation as defined in draft tax credit regulations to Income Tax Act;
	• Have a head office based in Canada and company's activities should take place in Canada;
	• Demonstrate financial stability (with appropriate exceptions for new production companies;
	• Operate principally as a television or film production entity
	
	Project Criteria:
	
	Projects eligible to apply for CTF support must comply with 4 Essential Requirements (as appropriate to each category of production and programming genre, as set out in the modules)
	
	• CTF supports the following programming genres: drama, documentary, children's and youth programming, performing arts and variety programming;
	• Projects comprising stock footage are eligible provided they satisfy CTF's genre and category definitions and are new productions;
	
	• Projects must have Canadian ownership and control, which include:
	  • Canadian executive and creative control;
	  • Under financial control of Canadian citizens or permanent residents;
	  • No more than 49% of the production financing/ final cost is provided by a single non-Canadian entity or person or related entiry;
	  • Control creatively and financially by a Canadian production company during all phases of production, and all distribution and exploitation rights are owned and initially controlled by a Canadian production company;
	  • Production company owns all rights (including copyright) and options necessary for the production and its distribution in Canada and abroad, and retains an ongoing financial interests in the project;
	
	• Projects must have an acceptable Canadian broadcast licence;

CANADA

Agencies/Schemes	Key Criteria

Canadian Television Fund (CTF)
 	
---- continue
	Criteria (continue)
	
	• A production must meet Technical Requirements:
	  • Confirm to CAB's Code of Ethics and all programming standards endorsed by CRTC;
	  • Has a broadcast length of at least 30 minutes;
	  • Only one application for a tv series may be made per CTF fiscal year;

Canada Council for the Arts (CCA)
    Established 1957.
 	
• Provides grants, services and awards to professional Canadian artists and arts organisations in dance, media arts, music, theatre, writing and publishing, interdisciplinary work and performance arts, and visual arts.
 	
Annual grants from Parliament; an endowment fund set up by Parliament in 1957.
	Grant Programs - eligibility criteria:
	
	• Applicants must:
	  • be Canadian citizens or permanent residents of Canada;
	  • be professional artists in one of the artistic fields - eg published writers, visual artists, musicians. Professional artists are defined as someone who has specialized training the field (not necessarily in academic institutions), who is recognized as such by peers working in the same artistic tradition, and who has a history of public presentation or publication.
	
	Grants:
	• range from C$3,000 to C$20,000, in increments of C$1,000.
	• Up to C$34,000 are granted to senior visual artists only

Business Development Bank of Canada (BDBC)
(wholly owned by government)
 	
• Provides **Cultural Industries Development Fund (CIDF)**
  • Fund essentially term loan to provide financing to small businesses operating in the cultural industries, i.e. film and multimedia production, book and periodical publishing, and sound recording.
	Criteria:
	
	• Eligible applicants must:
	  • Be cultural industry firms owned and controlled by Canadians;
	  • Be book editors, film and video producers and multimedia producers;
	  • Be businesses that have operated successfully for the past 24 months;
	  • Be businesses with a solid management team;
	  • Be businesses with good financial commitment from principals;
	  • Be businesses that have strong growth potential;
	  • Be businesses that possess a solid business plan;
	  • Be businesses with a debt-to-equity ratio smaller than 3:1.
	Features:
	
	• Loans of up to C$250,000 per 12 month period, and a total commitment of C$1 million over time;
	Terms of loan can be spread over 5 years and principal payments may be postponed during the first six months.

UNITED KINGDOM

Agencies/Schemes	Key Criteria

Film Council (FC). Launched 1 April 2000
 	
Majority of the government's funding for film is channelled through it. National Lottery is main source of funds.
 	
Program budget over £54 million over three years.
 	
FC sets up **3 different funds** to support filmmakers
 	
a) **Development Fund**
• to broaden quality, range and ambition of British film projects and talent. Budget of £5m a year.
 	
b) **New Cinema Fund**
• to back radical and innovative approaches and new voices, most especially new talent. Budget of £5 million a year.
 	
c) **Premiere Fund**
• to facilitate production of popular, commercially viable, mainstream British films. Budget of £10 million.
	General Criteria: Applicable to the 3 Funds
	
	• Applicants may only apply to one of the three funds at a time.
	• Foreign film-makers may apply for New Cinema and Premiere Funds, but their production companies will need to qualify as a British company in accordance with the Films Act 1985.
	• Projects should be developed as feature length theatrical films for commercial exploitation in UK and rest of the world, and be intended for production in the English language.
	• FC will expect and require a profit share commensurate with its participation in the funding in relation to other investors. For Development Funding, FC will require an agreed profit anticipation (of up to 5% of producer's share of net profits) in funded projects which go into production.
	• FC will expect and require a share of copyright in projects funded.
	  • For Development Fund, FC will require a share of all rights including copyright in the development work as security for its investment. It will take a 50% share of interest, with 50% to be retained by the producer, if there is no third party investor.
	  • For New Cinema Fund and Premiere Fund, the share of copyright is in the film and in the underlying and ancillary rights commensurate with its investment in relation to other investors.
	• FC will expect and require to be offered recoupment terms consistent with those offered to other equity investors.
	  • For Development Fund, applicants will normally have to repay to FC the funding on the first day of principal photography of any production based on the development work with a 50% premium.
	
	Criteria - Development Fund:
	
	• Individuals and companies are eligible to apply to this Fund.
	• Applicants are expected to contribute towards cost of the development either directly or by arranging co-funding via third parties. FC cannot fund 100% of development costs of any project for this fund.

UNITED KINGDOM

Agencies	Key Schemes
Film Council [continue]	Criteria – New Cinema Fund (NCF) • This fund is available only to limited liability companies. Individuals may apply on behalf of themselves and subsequently establish a company if their application is successful. • NCF will usually contribute between 15% and 50% of a feature film's budget. Funding is usually provided by way of investment. • Applicants will need to present a convincing vision for their project, in terms of creative direction, financing, distribution and marketing. They will also need to demonstrate an ability to be instrumental to the realization of such a vision. Criteria – Premiere Fund (PF): • Funding is only available to limited liability companies, and to support commercially viable projects. • PF will normally contribute up to 35% of a film's budget. Funding is by way of investment in film's production costs and or/costs associated with making film available to the public.
British Film Commission (BFC) • Part of Film Council, but has retained its identity so as to continue its role to encourage inward investment to the UK from international production companies, such as getting foreign producers to use UK studios, facilities, expertise, locations and personnel.	• Is not involve in funding of any project. • Provides information on finance in UK on its website to assist foreign film-makers, which include: • UK financial laws, rules and regulations that need to be observed; • Financial institutions; • Production finance, such as companies in UK which provide production finance to film companies.