

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

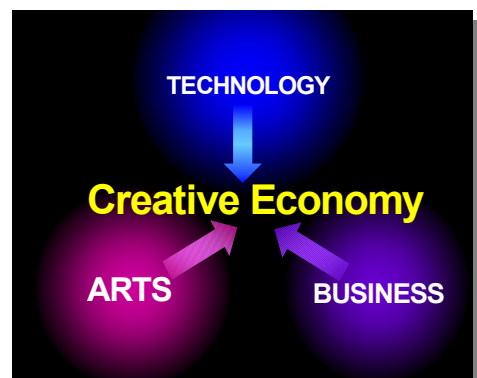
Definition – “the ability to create meaningful new forms”

Webster's dictionary

Prof Richard Florida, a regional economic development professor at Carnegie Mellon University argues that creativity is multidimensional¹. 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.



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. McKinsey³ 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

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 absenteeism⁴. 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 motivation⁵.

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**.

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	<ul style="list-style-type: none"> ▪ 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	<ul style="list-style-type: none"> ▪ 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	<ul style="list-style-type: none"> ▪ 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	<p>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.</p> <ul style="list-style-type: none"> ▪ 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 m² 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	<ul style="list-style-type: none"> ▪ 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

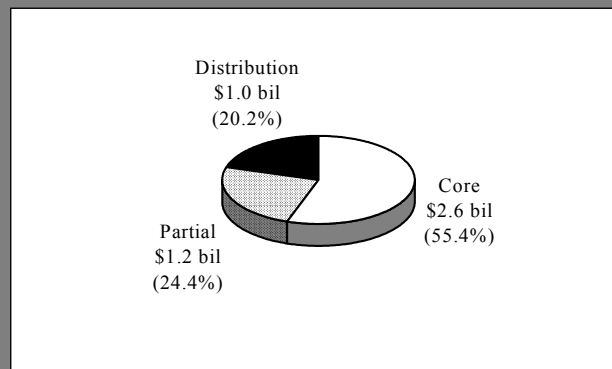
** The definition of UK creative industries is slightly different from the definition of total copyright industries adopted by US and Australia. The identified industries comprise advertising, architecture, the art and antiques market, crafts, design, designer fashion, film and video, interactive leisure 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)



- 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 entrepreneurship, 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.