

Draft

**Digital Content Promotion in East Asia:
Government Strategies for a New Economic Sector**

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In the global competition to create and sustain innovation economies, governments wrestle with the challenge of identifying growth sectors, nurturing their emergence and supporting their acceleration. National authorities have experienced some success in the hardware-related elements of the digital economy, capitalizing on decades of experience with industrial strategies and a general familiarity with business promotion in the highly competitive manufacturing economy.

The digital content industry presents new challenges.¹ While there are manufacturing elements – video games have to be produced, packaged and delivered – the core elements of the digital content economy are creative.² They require the intervention of animators, designers, storytellers, musicians and numerous other professional and artistic personnel, sharing more in common with television and movie production and publishing than traditional export-oriented manufacturing.³ As Stuart Cunningham and co-authors asked,

What would an innovation systems approach to the creative, and especially the digital, content industries look like? This is important for two reasons: such an approach may open up dynamic and central policy territory which has been the preserve of science, engineering and technology (SET) worldwide; and it asks new questions, outside the domain of cultural support, which may precipitate a more holistic approach to the creative industries.

As governments work to prepare their national workforces for the needs of a rapidly evolving global economy, most countries have paid limited attention to the expanding needs and opportunities in the still-new digital content sector.⁴ The unique nature of the digital content space and the conservatism of national economic strategies have made it difficult for national governments to formulate responsive and effective strategies for building what, by all evidence,

¹ Enrique Bustamante, "Cultural industries in the digital age: some provisional conclusions." *Media, Culture & Society* 26, no. 6 (2004): 803-820; Kirsten Drotner, and Kim Christian Schrøder, eds. *Digital Content Creation: Perceptions, Practices, & Perspectives*. Vol. 46. Peter Lang, 2010.

² Ruth Towse and Christian Handka, eds. *Handbook on the digital creative economy*. Edward Elgar Publishing, 2013.

³ Stuart Cunningham, Terry Cutler, Greg Hearn, Mark Ryan, and Michael Keane. "An innovation agenda for the creative industries: where is the R&D?." *Media International Australia Incorporating Culture and Policy* 112, no. 1 (2004): 174-185. Tom O'Regan, Tom, and Ben Goldsmith. "Making cultural policy: Meeting cultural objectives in a digital environment." *Television & New Media* 7, no. 1 (2006): 68-91.

⁴ David Throsby, *The economics of cultural policy*. Cambridge University Press, 2010.

is going to remain a key part of the global economy. This paper focuses on Japan and South Korea and examines the manner in they have attempted to capitalize on the economic and employment potential of the digital content sector.

Digital Content as Public Policy

The digital content sector presents some fascinating public policy challenges for national and regional governments. As administrators and politicians contemplate the trajectory of the 21st century economy, they have typically divided their policy initiatives into two streams:

- standard industrial policies, focused on the support and subsidization of manufacturing and processing facilities, typically with a view of expanding employment and capitalizing on the complex supply chains and service functions related to large scale industries. Governments have persisted with these policies despite the sharp decline in industrial investments and productions in many countries and the relocation of many facilities to low-wage, investor-friendly political environments;
- evolving innovation policies which emphasize the intersection of basic scientific and technological research and the commercialization of new products and services. Governments around the world have invested heavily in the “new economy,” believing that high value companies like Sun Systems, Cisco, Foxconn, Google, Alibaba, Amazon, Blackberry, Apple, Rakuten, Facebook, Four Thirty Three and others can be reproduced through judicious investments in post-secondary education (highly qualified personnel), basic research (intellectual property) and commercialization initiatives (moving products and services to market). Although the return from government commitments has been below expectations, enthusiasm about the new economy has meant that governments continue to pour money into trying to build innovation economies.⁵

⁵ There is a vast literature on national innovation systems, which have been driving government economic policy for the past 20 years. See Bengt-Åke Lundvall, "National innovation systems—analytical concept and development tool." *Industry and innovation* 14, no. 1 (2007): 95-119. See also the classic study Richard R. Nelson, "National systems of innovation: a comparative study." (1993) and Bo Carlsson, Staffan Jacobsson, Magnus Holmén, and Annika Rickne. "Innovation systems: analytical and methodological issues." *Research policy* 31, no. 2 (2002): 233-245.

Digital content does not fit into either of these two primary public policy fields.⁶ With a few exceptions, such as Facebook (social media), Netflix (movies and television), TenCent (video games), ProQuest (educational content), Twitter (social media), Nintendo (video games and other internet related products and services), digital content firms tend to be small, cyclical and unpredictable.⁷ Even the larger digital content firms, like Twitter, Nintendo and Electronic Arts, and have fewer employees (around 3,500 in 2017 in the case of Twitter) than a moderately sized automobile factory. Many of the contributors, working in fields from animation, video games and online chatrooms to YouTube videos and multi-player online games, are gig economy workers who migrate between firms or operate as contractors for the main production houses. Others, particularly in online marketing and advertising, have more traditional, professional workforces but their comparatively small size has not stopped them from having an outsized commercial footprint. The most financially successful companies – Facebook, YouTube, Twitter, eBay, Spotify, iTunes, WeChat and Weibo – have earnings significantly out of proportion to the number of employees, operate digital platforms, with the content contributed by others and with income gained from flow-through traffic. On the positive side, digital content firms can emerge from unlikely locations, like Shopify (Canada), Rovio (Finland), Skype (Estonia, Sweden and Denmark), and are not constrained by the standard economic factors that drive industrial development and the provision of professional services.

⁶ Stuart Cunningham, Terry A. Cutler, Mark David Ryan, Gregory N. Hearn, and Michael A. Keane. "Research and Innovation Systems in the Production of Digital Content and Applications. Content and Applications, Creative Industries Cluster Study Volume III." (2003). Mark Knickrehm, Bruno Berthon and Paul Daugherty, "Digital disruption: The growth multiplier: Optimizing digital investments to realize higher productivity and growth," (Accenture, 2016), <https://www.accenture.com/us-en/insight-digital-disruption-growth-multiplier>; Han Jieping, Cong Rijie and Wei Yaqiong, "The Research and Progress of Global Digital Content Industry," in *Innovative Computing and Information*, vol. 231, ed. Minli Dai, 132–42, Communications in Computer and Information Science (Berlin, Heidelberg: Springer Berlin Heidelberg, 2011), 134–35; Carin Holroyd and Ken Coates, *The Global Digital Economy* (New York: Cambria, 2014); David Rooney, Greg Hearn and Abraham Ninan, *Handbook on the Knowledge Economy* (Northampton, Massachusetts: Edward Elgar Publishing Limited, 2005).

⁷ For a list of the larger firms, see "The Top 100 Companies in the Digital Content Industry: The 2016-2017 EContent 100," *E-Content*, 1 November 2016,

(<http://www.econtentmag.com/Articles/Editorial/Feature/The-Top-100-Companies-in-the-Digital-Content-Industry-The-2016-2017-EContent-100-114156.htm>).

This, in turn, broadens the geographic scope of the new economy and raises the possibility of impressive employment and economic outcomes in non-metropolitan areas. The remarkable effort by dozens of cities, including many smaller centres, to attract a \$50 billion investment by Amazon.com for its second headquarters, is a testament to the belief of many local and regional governments that the digital content economy could produce lasting economic benefits.⁸

The policy options available to governments relevant to the digital content economy are quite different than those related to industrial and standard innovation sectors. National digital content policies are housed in a wide range of departments and administrative units.⁹ In much of the world including Canada and many European countries,¹⁰ governmental focus on digital content is much more about cultural heritage (including the digitizing of historical materials and treasures) or inclusivity (improving internet accessibility) than it is about digital content as an economic sector.¹¹

Digital content firms, often tied to such edgy markets as online pornography (one of the most profitable sub-fields),¹² avant-garde animation, dark and raunchy comedy, and YouTube videos (successful series routinely produce high profile, high-earning artists), do not fit easily with either large-scale industrial grants and subsidies or the craft-oriented artistic and cultural support systems. In addition, the rapid growth (and often equally rapid decline) of digital content enterprises, combined with the remarkably low rate of commercial success in the field,

⁸ "Amazon headquarters finalists: Some say winning would come at too high a price," *USA Today*, 25 January 2018. (<https://www.usatoday.com/story/tech/news/2018/01/25/your-city-made-amazons-headquarters-finalist-round-do-you-really-want/1059909001/>).

⁹ Tom O'Regan and Mark David Ryan. "From multimedia to digital content and applications: remaking policy for the digital content industries." *Media International Australia incorporating Culture and Policy* 112, no. 1 (2004): 28-49.

¹⁰ Nichola Garnham, "From cultural to creative industries: An analysis of the implications of the "creative industries" approach to arts and media policy making in the United Kingdom." *International journal of cultural policy* 11, no. 1 (2005): 15-29.

¹¹ Alfredo Ronchi, *eCulture: cultural content in the digital age*. Springer Science & Business Media, 2009; Ellen Goodman, "Media policy out of the box: Content abundance, attention scarcity, and the failures of digital markets." *Berkeley Tech. LJ* 19 (2004): 1389.

¹² Patchen Barss, *The Erotic Engine: How Pornography has Powered Mass Communication, from Gutenberg to Google* (Toronto: Anchor, 2011).

are a difficult fit with the success-obsessed government decision-makers. The emergence of the virtual digital economy presents important policy challenges for a government trying to regulate the sector.¹³ Equally, the artistically-driven, often counter-culture, and youth-focused digital content sector does not lend itself to easy integration with government policy-development, grant and subsidy systems, budgetary lobbying, and step-wise market cultivation and growth. Put more simply, the digital content sector does not move according to standard business cycles and typical economic development strategies.

National and regional governments have difficulty accommodating the digital content industry and comparatively few have tried systematically to cultivate and develop the sector. There are many individual success stories, some of these companies earning tens of millions of dollars from a single mobile application, video game, advertising gimmick, or other digital content initiative. The more successful firms – among the tiny number that rise up from vast start-up and digital content production systems – earn extremely high annual incomes and are global superstars. Much less noticeable, but of growing economic and employment importance, are the tens of thousands of independent contractors, many working from their home offices, who produce the content and support the efforts of the primary production houses.

Complicating matters, governments typically have only rudimentary data on the digital content sector since much of it is done in the black or underground market, capitalizes on new payment systems (including bitcoin and other crypto-currencies), works on a piecework basis, and operates easily across international boundaries. One of the challenges for governments in supporting the digital content sector is that it is not well-understood or defined as a specific industry. There is no clear statistical analysis of the shape, extent and evolution of the digital content economy as it intersects with the broader definitions of digital media, the cultural economy, the creative sector, and the transition of traditional sectors like newspapers, television, movies and computer games.

¹³ Vili Lehdonvirta, and Perttu Virtanen. "A new frontier in digital content policy: case studies in the regulation of virtual goods and artificial scarcity." *Policy & Internet* 2, no. 3 (2010): 7-29.

As a starting point, the digital content economy¹⁴ can be defined as the:

distribution and consumption of stored or real-time digital information that is created and accessed through a digital medium (audio, visual, or textual) that has the potential to generate a combination of material wealth and/or knowledge or cultural resources shaping economic and social development. The digital content economy is characterized as the relationship between digital content as a driver for knowledge-based societies and the digital economy as a vehicle for knowledge creation, representation, sharing, access and use that transcends traditional physical, social, geographic, and economic boundaries.¹⁵ New technologies “drive new ways of creating, distributing, preserving, and accessing digital content” through “[h]igh-speed communications, increasing upstream as well as downstream bandwidth, declining access prices, convergence of previously distinct networks, innovation in new devices and applications and lower entry barriers.”¹⁶

The development of a successful digital content sector rests on the necessary broadband infrastructure. Private and public partnerships have provided many countries with world-leading Internet connectivity, both through fiber optic cable and wireless services. Internet speeds have soared and the once-prohibitive charges for Internet services have fallen dramatically.

It is the Asian governments that have the most comprehensive digital content promotional and development policies in the world. The region dominates the production of digital hardware; many products currently identified with other countries, including Apple iPads and iPhones, are manufactured wholly or in large measure in the region. Building on the success of digital manufacturing, and Japan’s early domination of the video game market, South Korea, Japan, China and Taiwan made major investments in the standard elements of the digital economy (wireless and wired Internet services) but quickly broadened this out to support training, business development, international marketing and product enhancement in digital content.

¹⁴ Carin Holroyd and Joelena Leader, *The Digital Content Economy: The Commercial Dimensions and Nature of Digital Creative Production*, unpublished paper.

¹⁵ Organization for Economic Co-operation and Development (OECD), “OECD Policy Guidance for Digital Content,” (OECD Ministerial Meeting on the future of the Internet Economy, 2008), <https://www.oecd.org/sti/ieconomy/40895797.pdf>

¹⁶ *Ibid.*, 2

Asian governments have placed considerable importance on the development of the digital content economy. Animation, video games and other content elements lack the cache of other emerging technologies, like robotics, embedded medical devices, and alternative energy systems but the digital content sector does produce a sizable number of jobs and sustain many small and medium-sized businesses. The potential for future growth is considerable and, therefore, worthy of both financial investment and policy attention. Japan and South Korea have undertaken some very interesting policy, program, training and infrastructure approaches to assist their digital content companies start up and expand.¹⁷ The programs and policies described below are representative rather than comprehensive; each government uses many different administrative and financial measures that involve digital content to a greater or lesser degree. The initiatives described below, however, demonstrate ways in which governments are endeavoring to capitalize on the potential of the digital content sector and the possibility that strategic investments in digital content will produce substantial downstream employment, business and economic benefits.

Japan

Japan has long been aware of the commercial potential of the digital content sector. In 2002, the Japanese government made developing the content industry a key national strategy. A decade and a half later, Japan has a large, vibrant and profitable digital content sector. In 2015, the Media and Content Industry Division (MCID) of the Ministry of Economy, Trade and Industry Japan identified the country as having the second largest content market in the world, behind the United States, worth approximately US\$210 billion in 2015.¹⁸ MCID outlined the contours of the sector as follows:

¹⁷ Some sections of this paper draw on two earlier books – Carin Holroyd and Ken Coates, *Digital Media in East Asia* (Amherst: Cambria Press, 2012) and Carin Holroyd and Ken Coates, *The Global Digital Economy* (Amherst: Cambria Press, 2015).

¹⁸ Ministry of Economy, Trade and Industry (METI), “Content Industry: Current Status and Direction of Future Development” power point, April 2016.

Content Market in Japan (in JPY trillion)

VIDEOS	MUSIC/AUDIO	GAMES	PUBLICATION/NEWSPAPER
Video Packages 0.5T	Audio Packages 0.4T	Games Packages 0.2T	Books 0.8T
Movies 0.2T	Karaoke 0.5T	Online Games 0.9T	Magazines 1.1T
Broadcasting 3.5T	Performances Sales 0.2T	Mobiles Games 0.1T	Free Papers 0.2T
Others (online distribution, theatrical shows) 0.3T	Radio-related Services 0.1T	Arcade games 0.4T	Newspaper 1.5T
	Mobile Phones & Internet 0.1T		Others 1.0T

Source: Ministry of Economy, Trade and Industry, Media and Content Industry Division, “Content Industry: Current Status and Direction of Future Development”, April 2016.

Japanese digital content is well known internationally, with strong followings for animation, content, drama, music and movies in East Asia and South Asia. The Japanese advertising firm Hakuhodo conducted a survey asking how familiar people were with animation and comics from Japan, Korea, US and Europe. 79% of Hong Kong respondents said they were familiar with Japanese content (22% for Korea and 7% for US and Europe) and 68% of Taiwanese respondents said they were familiar with Japanese content (15% for Korea and 4% for US and Europe). While the percentages indicating a familiarity with Japanese animation and comics was lower for other Asian nations, it was still a significantly higher percentage than identified familiarity with Korean or American and European animation and comics.¹⁹

That said, Japan’s international sales in most digital content sectors is relatively small, representing only 2.5% of the total or \$13.8 billion, most from video games. Sales vary widely, from \$0.1 billion in broadcasting to 19.3% of all sales in gaming (worth \$11 billion in 2015). International sales of manga account for almost one-quarter of total sales in the sector (\$1.5

¹⁹ The percentage of people who were familiar with Japanese and Korean material is as follows: Ho Chi Minh City: 33% Japanese/10% Korean/ 8% American and European; for Jakarta: 32% Japanese/11% Korean/2% American and European/. For Singapore, the comparable numbers are 26%/15%/7%; Bangkok 26%/6%/6%; for Shanghai, the percentages are 24%/6%/9%. (METI, 2016).

billion). Sales of “character merchandise” are worth about \$900 million a year. Animation, representing a Japanese cultural strength and worth \$17 billion a year, gets only 1.4% (\$200 million) from overseas sales.²⁰ Here are some key digital content sectors, comparing total sales and foreign sales.

Japanese Digital Content Sales

Foreign and Total Sales, 2014 (JPY ¥ hundreds of millions)

Sector	Total Sales	Overseas Income
Animation	1,847	195
Video Game Software	15,596	13,747
Movies	2,070	91

Source: Ministry of Economy, Trade and Industry, Media and Content Industry Division, “Content Industry: Current Status and Direction of Future Development”, April 2016.

Japan identified content industry policy as a key national strategy in 2002. A Japan Brand Strategy was launched with the slogan “Cool Japan” and the Content Industry Promotion law was passed. In 2009, the Digital Japan Creation Project, designed to create a new growth strategy for the sector, was launched. In 2013, Prime Minister Shinzo Abe launched a series of structural reform proposals, one of which focused on the promotion of Cool Japan. Digital content is pivotal to this “Cool Japan” strategy, which aims to build off the appeal of Japanese cultural exports around the world to help build Japan’s economic growth. The government hopes to turn the interest in Japanese culture and lifestyle, including animation, manga, drama, music, food and clothing into value-added economic exports.²¹To this end, the government has invested substantially in pushing Japan’s digital content into international markets through a variety of initiatives, described below. The Cool Japan Strategy Council also offered concrete project proposals for private sector collaboration. On the content side, these proposals included the establishment of an organization to unify the country’s music industry and

²⁰ Ministry of Economy, Trade and Industry (METI), “Content Industry: Current Status and Direction of Future Development” power point, April 2016.

²¹ Ministry of Economy, Trade and Industry (METI), “Content Industry: Current Status and Direction of Future Development” power point, April 2016.

endeavour to spread J-Pop overseas and the development of an artist database and creative works archive.²²

The Cool Japan Fund, a public-private sector partnership, was launched in 2013 to provide risk capital and support for the international promotion of uniquely Japanese products and services. Along with clothing, food and housing, the Cool Japan Fund is designed for media and content products and services. Investment decisions are made based on the proposal's purpose, profitability and wider influence. The fund is scheduled to be in place for approximately 20 years.²³ The government has launched an additional subsidy program of US\$150 million annually, designed specifically to support the localization and promotion of Japanese visual media. To encourage high quality localization, creators or companies can apply for up to half the cost of subtitling, dubbing, translation, public relations or promotional activities.²⁴

CoFesta was created by the Ministry of Economy, Trade and Industry in 2007. Each year since, the government has co-sponsored numerous events showcasing Japanese content to the world. The four core events are the Tokyo Game Show, the Japan Content Showcase, the Tokyo International Film Festival and Anime Japan. The Japan Content Showcase, as an example, is an annual international content fair held in Tokyo and includes animation, music, film and television. In 2017, the Japan Contents Showcase attracted 371 exhibitors and 1,549 buyers.²⁵ A range of additional official events –including the Japan Media Arts Festival, Amazon Fashion Week, Tokyo Docs, the Digital Content Expo, the International Robot Exhibit and CEATEC (the Combined Exhibition of Advanced Technologies and Electronics Exhibition) plus partner and overseas events are also part of CoFesta.²⁶ Over 2 million visitors attend these events annually. CoFesta ambassadors, 160 international students who love Japanese content, are helping

²² Cool Japan Strategy Promotion Council, "Cool Japan Strategy Public-Private Collaboration Initiative", June 17, 2015.

²³ Cool Japan Fund - <https://www.cj-fund.co.jp/en/about/cjfund.html>; Cool Japan Fund Inc., "Cool Japan Fund" powerpoint, 2016.

²⁴ Cool Japan Fund, "Cool Japan Initiative" power point, July 2014; <http://www.arc-japanese-translation.com/blog/20150810/index.html>

²⁵ Press Release, Vol.3, "Record attendance at Japan Content Showcase 2017-11-20 - <http://www.jcs.tokyo/en/release/2017-11-20-1/>

²⁶ CoFesta - <https://www.cofesta.go.jp/pc/>

promote it overseas. The Government of Japan has considerable expectations for job creation, business development and international trade related to the digital content sector.

Other initiatives include sponsorship of the Asia Content Business Summit (a joint private and government meeting of content industry organizations from China, Hong Kong, Indonesia, Japan, Korea, Malaysia, Philippines, Singapore and Thailand) in an effort to promote Japanese content in Asian markets.²⁷ With government support, Japanese companies are now establishing “Japan Channel” which broadcasts Japan related content in numerous Asian and other international markets.²⁸

In Feb. 2018, the Abe government announced plans to make permanent residency easier to obtain for foreigners with animation, design or illustration expertise. The change to the immigration system is part of the Cool Japan initiative. The goal is to bring in talented foreigners who can contribute to the promotion of Japanese popular culture and cultural products overseas.²⁹

The government has also been an active participant in global anti-piracy initiatives and understands the importance of legal and enforcement measures to protect the digital content sector, especially manga and anime. The Manga-Anime Anti-Piracy Committee, composed of major manga and animation companies and METI, work to delete pirated copies, encourage fans not to use sites with pirated material and raise awareness about piracy issues domestically and internationally.³⁰ Japan has likewise supported a number of measures designed to improve the technological underpinnings of Japanese digital content production and distribution, including the creation of a new platform for manga, a Digital Content fair (DCExpo) that profiles new content-related technologies, and a national awards system that celebrates significant advances in the sector.³¹ METI also aims to train more young people in the production side of the content industry by subsidizing overseas study and creating opportunities for these youth

²⁷ METI 2016

²⁸ Cool Japan Fund, “Cool Japan Initiative”, July 2014.

²⁹ “Government eyes making permanent residency easier for ‘Cool Japan’ talent”, *The Japan Times*, Feb. 26, 2018.

³⁰ METI 2016

³¹ Ministry of Economy, Trade and Industry (METI), “Content Industry: Current Status and Direction of Future Development” power point, April 2016.

to work with business people in the content industry and learn about financing and marketing.³²

Japan's digital content activities, while globally impressive, have to this point failed to match achievements in Japanese manufacturing and general industry. There is considerable global fascination with Japan, in everything from judo and manga to Hello Kitty and sushi, positioning the country as a significant international cultural and lifestyle presence. It is hardly surprising that the Government of Japan, witnessing the strong domestic market for anime, video games and other digital products, would wish to reproduce the early consumer electronics industry, automobile production, robotics and other leading Japanese sectors in the digital content space. The country has a vibrant digital content sector which has created hundreds of businesses, tens of thousands of jobs, and substantial sales, albeit most of that domestic in nature. But despite considerable government support and encouragement, it is not yet showing signs of becoming the digital content equivalent of the automobile or personal computer industries.

Korean Digital Content Promotion

The South Korean government created the Korea Creative Content Agency (KOCCA) in 2009, bringing together five existing organizations into an influential organization charged with expanding the national presence in digital content. Korea's ambitious aspiration is to have the country ranked among the five top digital content countries. KOCCA supports the country's creative industries including gaming, animation and characters, cartoons and comics, music, broadcasting and fashion. KOCCA offers financial and other forms of assistance for production, marketing promotion, overseas sales and talent recruitment and development. Financial support is available for local content production, expansion overseas, investment attraction and the development and training of creative talent.

³² Ministry of Economy, Trade and Industry (METI), "Content Industry: Current Status and Direction of Future Development" power point, April 2016.

KOCCA's main initiative is the Contents Korea Lab. The main lab opened in 2014 and occupies four floors of Hongik University Daehakro Art Center in Seoul. Two regional centres opened later in 2014, followed by others in subsequent years with the goal of 10 additional regional centres. Labs have been opened in Incheon, Gyeonggi, Gyeonbuk, Daegu, Joenbuk and Busan. The goal of the Contents Korea Lab CKL is to support prospective creators and start-ups by allowing people to use equipment and facilities to create content and by providing shared working and creative space. Interestingly, all of the space is open to any Korean citizen. The moto of the Contents Korea Labs' is "sparkling small ideas can become global contents" so all Koreans are invited to use the facilities. Available equipment/spaces include a green studio, a recording studio, video editing suites, a sound editing suite, 3D printers, a pitching room, lecture rooms, meeting rooms, conference rooms, a library, a products showcase and numerous lounges. The open meeting spaces are beautifully designed. There is also a Content Job Counselling Centre.³³

KOCCA also runs the Hangeul Idea Award competition which is organized by the Korean Ministry of Culture, Sports and Tourism and sponsored by Naver. The competition is to promote the value of Hangeul, the Korean writing system, and its industrial applications. It is open to the general public and across fields and the winners are helped to commercialize their products.

Smart Contents Centre

The National IT Promotion Association (NIPA) opened the Smart Contents Centre in 2012. The Centre was established to nurture small digital content firms by giving them space at reduced rates (free rent and half price utility fees) for two years and providing advice and support to help these firms commercialize and export their smart content products. Tenant companies can use common facilities including a test bed room, OA equipment, meeting rooms, conference rooms etc. Professional consulting is offered and a range of networking and educational events take place. The Smart Contents Centre also works hard to promote its public image and the

³³ KOCCA - <http://eng.kocca.kr/en/contents.do?menuNo=201433>; visit to KOCCA in May 2017.

work of its member companies by producing a newsletter and hosting a range of public relations events, product launches and other events.

The Creative Center for Convergence Culture (CCCC)

The Center for Cultural Creative Convergence opened at the CJ E&M (entertainment and media company) center in Seoul in Feb. 2015. It closed suddenly in 2017 due to a political scandal connected to the now impeached and convicted former South Korean president. The goal of the centre was to develop “an environment in which a new concept of content, which combines analog and digital, art and technology, can be developed.”³⁴ Creators were given the use of state of the art facilities (motion studio, sound lab, idea lab, story lab, craft lab) at no charge. Customized training and mentorship programs and business workshops for start-up companies were available. There was an investor matching service for content companies and creators and a convergence content contest to allow new content to be showcased. Along with the production studios, there was an exhibition and showcase area, a media library and a lounge.³⁵ Cel Academy, a training centre for content creators, and cel Venture Complex, an incubator for content start-ups, also used to be part of CCCC. Cel Venture complex is now called the Contents Korea Lab Company Support Centre. The objective of the Support Center is to assist start-up companies with relocation, manufacturing, commercialization and distribution.

Digital Media City

Seoul’s Digital Media City (DMC), planned and funded by the Seoul City government, was designed to be a digital media cluster. Bringing together researchers, companies and digital content creators, the DMC is a hub for research and development, production and marketing of digital content. Built on land donated by the national government, part of which was formerly an enormous garbage dump, construction of Digital Media City (DMC) started in 2002 after the

³⁴ “CJ, Gov’t Help Young Artists with Cultural Content Creation”, Business Korea, July 1, 2015 - <http://www.businesskorea.co.kr/english/news/smestartups/11243-entertainment-driver-cj-govt-help-young-artists-cultural-content-creation>

³⁵ Visit to CCCC May 2017; CCCC brochure; <http://blog.naver.com/hellopolicy/220635443644>

Incheon airport opened in 2001 and Korea and Japan co-hosted the Soccer World Cup in 2002. The goal was to develop DMC as a Gateway City (the future station for the Eurasia Railroad if Korea reunifies) gateway to Incheon airport and “center where the world and Seoul meet”. Today, the DMC is surrounded by residential and business districts and is a short metro ride from central Seoul.

The purpose of DMC was to bring together technology and creativity and to encourage the exchange of ideas by bringing together advanced digital media companies and combining technology-based businesses with creative ideas. Three main industry fields – media and entertainment (broadcasting, game, film/animation, music and digital education), software related to media and entertainment, IT related to media and entertainment – are the focus of Digital Media City. As of March 2017, there are 476 companies resident in DMC. 57% are in media and entertainment, 385 in IT and 5% in news and broadcasting. (This is lower than the initial goal of 800 companies.) Over 90% of the office occupants are small and medium-sized enterprises, 6% are public sector institutions and large companies make up only 4% of the total. (The Seoul Business Agency, the government agency in charge of DMC is focused on SMEs and job creation.) There are 42 completed buildings and they are 94% full. Major companies include Samsung SDS, MBC, Gugak FM, JTBC, TBS/OGNm sBS, YTN, Channel A, CJ&M.³⁶ KOCCA has an office at DMC as does NIPA. DMC holds events (eg. Virtual Reality contents competitions, DMC convergence forum, street festivals) and is often used as a film set and broadcasting studio. In 2014, 2015 and 2016, DMC hosted a film festival that attracted half a million visitors. Digital Media Street runs through the DMC. Firms display elements of their digital content along the street.³⁷

Both the Seoul Business Agency and the Digital Media City Cooperation Network (DMC Co Net), a network of resident companies, has a variety of initiatives to support both new and established companies. The DMC Hi-Tech Industry Center leases office space at discounted

³⁶ Visit to Digital Media City, May 2017. Seoul Business Association, “Digital Media City – Welcome to the state-of-the-art M&E Cluster”, powerpoint

³⁷ Visit to Digital Media City and presentation by Soohyun Kim and Jeonghyeon Lee, Assistant Managers, Cluster Promotion Team, Seoul Business Association, May 29, 2017.

rates and offers assistance with marketing, pitching etc. DMC CoNet holds meetings and networking forums while SBA sponsors awards and offers training or seminars on new technology trends. SBA's focus is the development of an industrial cluster in Seoul so it assists individual companies and works to build the cluster itself.³⁸ According to one of the planners of the DMC project, in the early planning stages small digital media firms were asked what would help them become successful. Inexpensive office space and access to specialized equipment and facilities were the answers so these became part of the assistance SBA provides at DMC. In return, companies are obliged to stay at DMC for at least a decade and at least half of the space they rent must be used for the production of digital content.³⁹ SBA used to operate the DMC Global Business Lounge – office spaces and other forms of business management support to overseas businesses and foreign companies wanting to invest in Seoul.⁴⁰ DMC idea has been getting a lot of interest from outside South Korea. There have been articles in Business Week and the Manchester Business School Magazine and in Chinese, Spanish and French newspapers. Recent visitors from Belgium and Malaysia have been interested in copying the model.⁴¹

Seoul Animation Centre

Seoul has also been actively supporting its animation sector. The city offers content production assistance and technical support (eg. video and sound editing) for original animation and webtoons, marketing and pitching support, assistance with entry into overseas markets (for example, financial assistance for companies wishing to participate in particular trade shows like Gamescom in Germany, the China Digital Entertainment Expo or the Hong Kong International Licensing Show.)

The Seoul Animation Centre, also operated by the Seoul Business Agency, opened in 1999 to support the comics and animation sectors. Games and characters were included later. The

³⁸ Communication with Soohyun Ko, Assistant Manager, Cluster Promotion Team, Seoul Business Association, May 29th, 2017.

³⁹ Interview with Dr. Donyun Kim, former head of urban planning on the DMC, April 14, 2011.

⁴⁰ Seoul Business Association pamphlet, received May 2017.

⁴¹ Visit to Digital Media City and presentation by Soohyun Kim and Jeonghyeon Lee, Assistant Managers, Cluster Promotion Team, Seoul Business Association, May 29, 2017.

centre includes the Seoul Cartoon Museum, an animation cinema, an exhibition room and various spaces for students, content businesses and creators to learn and create. Hands on experience programs including creating a character from clay and then filming a video clip; a voice actor dubbing experience; a show picture making program and a cosplay studio are all available⁴². Content creators can get production, marketing and technical support. The Seoul Animation Centre hosts the Seoul International Cartoon and Animation Festival and other film festivals. The area near the Animation Centre , Namsan Mountain, is becoming an “Anitown”. Zaemiro, one of the main streets, has been nicknamed Seoul Comics Road. All down the street are murals, statues and other forms of street art showcasing Korean cartoons and animation. The Comic Book Museum and various galleries and character stores are also located on Zaemiro. Public events such as parades, art markets and cosplay events are held along this road.⁴³

Toward Digital Content Economies in Asia: In the rapidly globalizing and digitizing world, national governments face the formidable challenge of promoting economic prosperity while preparing the country’s business communities for competitiveness in emerging technology-based sectors. To this is the added burden of understanding and responding to the employment dynamics of the digital age, a considerable socio-economic force that is adding to government concerns about the 21st century. In this environment, the economic and employment potential of digital content has been curiously underestimated. The sector continues to expand, with the video game industry overtaking movie-making, animation growing in importance, and new areas, like multi-player online games, vlogs, YouTube celebrities, DIY (Do it yourself) videos, specialized digital content services, and others, developing large and valuable markets.

Asian countries, which dominate the production of digital hardware, seem determined to do the same in the digital content space. The South Korean and Japanese governments have invested significantly in the sector, have created funding and promotional programs, and see

⁴² Seoul Animation Center pamphlet, received May 2017.

⁴³ Ibid

national governments as playing a significant role in the development of digital content jobs and companies. Importantly, these governments realize that the world's largest and fastest growing digital content markets lie in Asia, giving national producers an important advantage over non-Asian competitors. While many of the initiatives are recent and, therefore, unproven, investments made a decade or more ago have borne substantial fruit, adding to Asia's promising beginnings as a global powerhouse in digital content production.

The digital content economy provides important opportunities for national governments, for it provides substantial employment, significant entrepreneurial opportunities, and possibilities for general economic growth. Beyond the standard economic and commercial drivers, however, digital content connects to concepts of linguistic and cultural sovereignty, fear of cultural intrusions, particularly from America and Europe, and the long-standing interest of national governments in promoting artistic and creative activity. For countries around the world, the digital content economy presents a variety of policy opportunities as governments wrestle with the challenges of developing an effective response to a field of considerable transition and potential long-term growth.