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THE DEVELOPMENT OF DIGITAL CULTURAL PRODUCTS IN THE AGE OF GLOBALIZATION: FOCUSING ON THE KOREAN DIGITALIZED ANIMATION INDUSTRY

A Dissertation

Submitted to

The Temple University Graduate Board

In Partial Fulfillment

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DOCTOR OF PHILOSOPHY

By

Jae-Woong Kwon

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ABSTRACT

Title: The Development of Digital Cultural Products in the Age of Globalization: Focusing on the Korean Digitalized Animation Industry

Degree: Doctor of Philosophy

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Doctoral Advisory Committee Chair: Dr. John A. Lent

This research examines Korean digital animation by focusing on the production process. In order to demonstrate that Korean digital animation is globalized, this study analyzes its industrial characteristics and associated policy.

Based on theories of globalization and cultural industries, Research Question Group 1 focuses on the economic area and Research Question Group 2 examines the political area.

This study is conducted using qualitative methods. The first is the document data analysis and the second is comprised of in-depth interviews. Several documents such as newspaper articles and articles of academic journals are reviewed. For the interview phase, twelve people were interviewed. Four of them are directors and CEOs of production companies, six people work as policy managers, and the remaining two are professors who study animation.

The results are as follows:

(a) Three industrial sectors provide societal bases that accelerate digitalization. In the animation industry, the decrease of subcontract-based animation and the global success of United States digital animation stimulate digitalization worldwide. In cultural

industries, the paradigm shift in cultural policy, the quantitative growth, and the importance of cultural industries in raising the local economy work as factors to develop digital animation. Lastly in the information and communication technology industry, the rapid growth, the advent of new media, and the introduction of a new society paradigm require more content in the form of software.

(b) There are several changes that have accompanied the advent of digital animation. Production companies show a changed nature and structure. These companies now concentrate on making co-production contracts with foreign companies. The co-production system with two regional groups establishes regionalization. Furthermore, production companies diversify their business on the basis of the One Source Multi Use strategy. Also observed is a focus on the development of characters for digital animation works as well as emphasis on global market sales.

(c) Supporting programs for digital animation are offered by both the national and local governments in Korea. In the national government, the Ministry of Culture & Tourism and the Korea Culture & Content Agency provide most available support programs. In the local area, GIMC plays an important role in developing Chuncheon's animation industry. Its changed role has resulted in Chuncheon's establishment of its global network as the local cluster, which is another example of regionalization.

On the basis of these results, the findings suggest that the role of nation-states has changed and two types of regionalization have emerged in Korea. Therefore, the conclusion is that the Korean digitalized animation industry is being globalized.

This research consequently works as the basis from which to look at the Korean animation industry in new ways that contradict the existing thought that Korea is one of

the main subcontract-based production countries. These findings thus provide strong evidence for further study of the Korean digitalized animation industry in terms of international communication.

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CHAPTER 1

INTRODUCTION

The 20th century, having started with the development of modern industries, particularly manufacturing, witnessed the advent of information and communication technologies by the mid-century. With these new technological industries becoming the leading force displacing their predecessors, the 21st century began. Next, the broad distribution of personal computers along with the rapid development of information technology in the 1990s turned the term "digital" into a household word. In addition, the connection between this new prime mover and culture created a new concept "digital cultural products," now recognized in the 21st century as having potential.

To date, the research on digital cultural products has been conducted by only a few countries that possess enough competitive market power to dominate the world market. There are several developing countries, however, that are rising to prominence and seizing the opportunity from fully developed countries in cultural industries as well as in the information and communication technology area. Hong Kong, Korea, Singapore, and Taiwan, referred to as Asia's "Four Dragons," are a case in point. The name of Asia's Four Dragons originated from the fact that these countries not only have had impressive economic development during the final twenty-five years of the 20th century, but also have been on the cutting edge in the implementation of information and communication technologies. Therefore, examining these countries carefully as to how they have become prominent in the IT industry will be another important issue in international communication. In particular, research could be expanded to all of these

Asian countries if an investigation were based within one individual country as the first step. This study serves as that starting point.

Digital cultural industries combine characteristics of the information and communication technology industries as well as of the cultural industries. These industries reap tremendous financial profits and receive much attention around the world. Korea, in particular, is the country that has promising potential and is trying to make a quantum leap economically through utilization of these industries. Korea has a relatively long animation history for Asia, and in addition shows rapid development in the area of information and communication technologies. If digital animation can ride the Korean Wave,[1] currently taking place in the Asian region, the digital animation industry is worthy of study. Moreover, since systematic research on digital animation has not been conducted sufficiently both in terms of its quantity as well as its quality, such research is particularly valuable.

Thus, the central focus of this study of Korean digital animation will be an examination of the industrial characteristics caused by digitalization as well as of the supporting systems managed by governments.

Research Objectives

The objective of this research is to examine the digital animation industry and current government policies and supporting systems. Such goals of this research can be explained in more detail within the following categories: academic, social, and personal.

[1] From the late 1990s, Korean cultural products—for example, television dramas, music, and films—have been distributed and consumed throughout Asia, including China, Japan, Mongolia, Taiwan, Thailand, and Vietnam.

Academic Objectives

The academic objective of this study emerged from the fact that the pace of research on digital animation has not kept up with that of the industry and market. Academic inquiries into Korean animation from the perspective of cultural industries have been relatively slow in progress, when compared with the growth of the animation industry overall. In particular, research in the digital animation industry, which is narrower than the entire animation industry, is in need of more social academic research and foundation. Therefore, it is necessary to provide and explain the up-to-date information about the digital animation industry, and this research will be helpful to those who conduct research on the current situation of international digital animation.

Social Objectives

The first social aim of this research is to determine the social role of digital animation in Korea. As one of the major subcontractors in the world, Korea has received orders for, produced on a large scale, and exported animation to several countries. The United States and Japan are major countries that have imported Korean-made animation. Even though those Korean-made products are not identified as Korean animation, Korea is already well-known for its drawing skills, its production scales, and the number of animations works that it has exported. With this social context, the movement to emphasize on digital content as a growing force in the Korean economy calls for more attention to digital animation. Therefore, it is important to examine the meaning of digital animation to Korean society as well as the role of digital animation in the Korean economy.

Secondly, it is necessary to provide opportunities in which the thoughts of practitioners can be connected to those of the policy makers. Most digital animation producers either have been the traditional type of hand-drawn animators or the more modern type of computer graphic professionals before they devoted themselves to digital animation production. So, they have a great amount of work experience and have their own insights into the digital animation industry. Therefore this study will enable an in-depth evaluation of their respective roles in Korean society and will provide producers and policy managers with the opportunity to evaluate each perspective.

Personal Objectives

The personal reason that I have chosen this area of study is related to my knowledge of the culture of the country in which I was raised. Therefore, it is natural for me to possess more basic background information than foreign researchers who study Korea. In particular, Korean culture is embedded in its unique language, Han Geul, which is not related to languages of neighboring countries; therefore, it is no exaggeration to say that I have an advantage in my ability to collect and comprehend more data than foreign researchers. In addition, through studying the field of history as an academic major, I have built up a comprehensive foundation of sociological and historical information about Korea as well as accumulated knowledge about neighboring countries such as China and Japan. Such a strong background will be invaluable to this research project.

Previous Research on Animation

It is useful to review previous research on animation before presenting this research. This section will discuss key topics and areas that have been studied previously

in the area of animation and then provide the reasons why Korean digitalized animation in particular requires examination. As this research will be conducted from the perspective of cultural industries, the review of previous research will focus primarily on industry-related areas.

This investigation of existing research is conducted on two levels: one will focus on animation research conducted in English and the other on Korean animation research written in Korean.

Research on Animation as a Cultural Product

Despite the fact that animation has gained global popularity and financial success, the exploration of international animation as a cultural product from an academic perspective is still relatively rare.

Many studies about animation have been undertaken from a variety of perspectives. For instance, investigations have covered such areas as: analyses of social characteristics through US animation history (Solomon, 1983; Wells, 2002); influences, production structure, and content analysis of Disney animation and comics (Dorfman & Mattelart, 1975; Wasko, 2001; Artz, 2002); a historical approach to the development of animation (Bendazzi, 1994; Pilling, 1997); a literature analysis of animation research (Furniss, 1998, 1999); and Japanese animation research (McCarthy, 1999; Napier, 2000). Academic output on animation as a cultural product, however, is rare.

The small number of studies that do analyze international animation as a cultural product are limited to one specific area of research or geography. This body of research focuses on the outsourcing system, also called the subcontract system, which is prevalent in the geographical area of Asia. The prevalence of this type of system stems from the

fact that several Asian countries, rather than other countries in the rest of the world, have produced and are still making a great deal of animation based on this production system and that the amount of animation that Asian countries turn out is having an effect on the world animation market. Nevertheless, the lack of research on Asian animation is still noteworthy (Lent, 2001b).

Lent (1998, 2001d) explains why the outsourcing system appeared first in the US animation history and analyzes how the outsourcing system has been developed, the organization of labor for this system, and the state of the industry through the cases of Korea, the Philippines, and Taiwan. Importantly, Lent (1998, 2001d) examines several Asian countries altogether and points out industrial characteristics commonly found in these countries. Still, except for Lent's studies (1998, 2001d), most research examines the production system of each country separately.

Yu (1999) is similar to Lent (1998, 2001d) in that Yu focuses on the outsourcing systems and labor situation. Yet he chooses to study Korea only and examines how Korea takes advantage of its strong points such as cheap and highly-skilled labor and how it has developed its animation industry through subcontracts. The research conducted by Lent and Yu (2001) focuses more on policies led by the Korean government from the mid-1990s, structural problems that have been imminent for some time, and the procedures for producing more of its own animation. This study also deals solely with the country of Korea. Most research on the Asian animation industry and market is similar to that of Yu, K. E. (1999) and Yu, S. H. (2001).

Several Asian countries well-known for producing animation are studied separately. Lent (2001c) as well as Shiau and Lent (2003) deal with Taiwan. They focus

on James Wang, a Taiwanese magnate, and investigate how he has influenced the extensive development of the outsourcing system.

Likewise, Lent (2001a) focuses on India alone and investigates the development of its internal animation industry promoted by the know-how accumulated through long time outsourcing production and its abundant labor force. While this study focuses primarily on the outsourcing system, Lent's other work (2003b) emphasizes the change in the nature of production in terms of its transformation from the subcontract to the co-production system. Lent's work (2003b) is important in that, unlike other studies on Asia, it focuses on the recent changes resulting from the global success of US digital animation.

Levi (2001) scrutinizes the production system of Japan. Hers is similar to other research in that she deals with the outsourcing system, but from a different perspective. According to Levi, Japan is famous for its own production system that is equal to the US in its influence over the global market, yet has its own weak spot internally. Japanese companies that are mostly either small- or mid- sized have difficulty in raising capital and thus have to fall back on subcontracts due to the high price of using the domestic labor force. The reason why this research needs attention is the serious problem that lies in Japan's continued reliance on the cel animation format even though this country has the ability to produce digital animation.

In addition to these studies, several analyses of Asian countries have been conducted to date. But, most research explains only the state of the animation industry. Ehrlich and Jin (2001), Hu (2001), Mahamood (2001), Soon (2001), Lent (2001e, 2003a), Tolentino (2001) and Deneroff (2001) are cases in point. They deserve attention in that they provide valuable information on a wide array of Asian countries, including China,

Hong Kong, Malaysia, Singapore, Thailand, the Philippines and Vietnam, respectively. Nevertheless, their works are limited to general information about the domestic industry that is not connected to either digital animation or to the global market.

It is important to note that Tschang and Goldstein (2004) conduct a comparative study of production processes. The results show that the US emphasizes digitalized animation, which requires sophisticated technologies, while the Philippines continues to use an outsourcing production system. This research is important in that it suggests that digital animation is picked up and used for stressing the problem of the outsourcing system through comparison of two countries' systems.

As reviewed above, most research dealing with animation production and industry is geographically limited to exploration of Asian industries. It is important to keep an eye on Asia in the sense that Asia still plays a crucial role in animation production. Yet, first of all, most research works focus mainly on problems and characteristics caused by the outsourcing system. Second, most research was conducted before and after 2000, which means they do not cover the most recent situation. Third, there is no research on digital animation made in Asia even though it is well known that several countries such as China, India, Japan, and Korea have the capacity to produce digital animation. Thus there is the need for a study to examine the current situation that includes an examination of digital animation.

Key Points of Previous Korean Animation Research

While the previous section focuses on research conducted in English, this part introduces research published in Korean. Through an investigation of Korean research, we shall demonstrate the need to study digital animation.

Around the mid 1990s, research on Korean animation increased. But, the number of topics was limited to particular areas. One of the most important research areas examined the outsourcing system. Since Korea has mainly produced animation through subcontracts, problems and drawbacks of the outsourcing system are a crucial, prevalent Korean research topic for dissertation research.

Noh (1995) wrote an academic research paper exploring the subcontracting production system, as did Yoon (1995). Their works are similar in that both examine chronic problems within the distribution and production systems. Similar research works followed: Chung (1998), Chung (1999), Kim, H. R. (2002), Kim, J. K. (2002), Kim, S. J. (2003), and Lee (2003) are cases in point. All these analyses point out that the problem that has been accumulated for a long time by the outsourcing system; furthermore, most of these studies do not provide an explanation for how such problems are connected to the current production system.

The second point of research interest is the apparent influence of Japanese animation on the Korean industry. After re-establishing diplomatic relations between the two countries in 1965, there has been a large number of political, economic and social interchanges. This societal change led Koreans to reconsider Japanese animation, and this reconsideration resulted in several research works exploring the main reasons why Koreans became excited from watching Japanese animation and the consequences that are reflected in Korean animation. For example, Park (1997) deals with both comic books and animation together because he thinks both areas have a mutually connecting loop that accounts for their great impact in Korea when combined. Moreover, Yum (1999) analyzes features of specific genres—robot mechanics and female stories—that are

popular and well-known among various genres and that run parallel with the key features of certain renowned directors such as Mamoru Oshii.

Furthermore, some publications of the Korean Society of Cartoon and Animation Studies (KOSCAS) focus on analyzing Japanese animation from diverse perspectives. For instance, *An analysis and criticism on Japanese animation*, which is volume 3 of KOSCAS's periodicals (1999), deals exclusively with Japanese animation. This work includes research that discusses such viewpoints as Japanese animation, the general features of Japanese animation, and a cultural study on Japanese animation.

The limitation of research in this area, however, is that these studies do not directly explore the potential influence of Japanese animation. Rather, they mostly look at the official introduction of Japanese animation that occurred in the late 1990s from a negative perspective.

The third area of Korean research focuses on the connection between Japanese and US animation. Most studies in this area mainly examine the content of both Japanese and the US animation, since there are few Korean producers and script writers who can create content for feature-length animation. This production problem also works as a serious obstacle for exportation of Korea's own animation to the world market. Because of this weak point of Korean animation, people who are involved in animation ignore Korean work in favor of the content of US and Japanese products.

For instance, Korean research studies have thoroughly investigated the animation made by Disney and the Ghibli Studios. Moreover, there is research comparing Korea, Japan, and the US, mostly narrative analyses based on aesthetic and philosophical

theories. Park, K. S. (2004), Chung (2001), Cho (1999), and Yun (1999) are cases in point.

The second type is the study of US animation. These studies focus mainly on Disney animation, since most US animation production released in Korea is made and distributed in the name of Disney. This research not only analyzes the narratives, but also provides reasons why the content of US animations is the main key to their success in the market. Research on US animation appears mainly in the form of academic dissertations. Lee, J. Y. (2004), Yoo (2003), Cho (2003), and Kim, H. S. (2002) are examples of dissertations that treat U.S. animation as a research topic. Moreover, Lee (1998) and Kim, D. O. (2002) analyze the narratives of several US animations.

The third type of Korean research examines an array of areas related to Japanese animation. The general research deals with: Japanese animation comprehensively [e.g., Hwang (2003), Park, I. H. (2003), Kim, Kim, Kim, Lee, and Lee (2001)]; a story analysis of specific producers such as Hayao Miyazaki [e.g., Chung (2004), Kim, Y. A. (1998), Hwang (1997), Chung (1999)]; an intensive narrative analysis using modern philosophical theories such as postmodernism [e.g., Lee, E. S. (2004), Yim (2003), Choi, K. S. (2002), Han (1998, 2001)]; and an exploration that connects narratives to social phenomenon [e.g., Kim, J. M. (2003), Oh (2004), Cheon (2002), Lee (2000)]. Interestingly, there is research that examines animation from the viewpoint of theology. This approach offers a religious interpretation of unique features that are present only in Japanese animation [Kim, J. W. (2003) and Park (2000)]. The research in this area of Japanese animation is more important than research dealing with other topics, since digital animation was developed in order to improve the production system while still

prolonging the problematic issue of content. Therefore, studies of Japanese animation need a strong component of any future research on the content of digital animation.

In addition to these research works, examinations of digital animation begin to appear after 2000. Choi, J. I. (2004), Heo, Y. H. (2003), Kang (2000), Kim, H. Y. (2004), Lee, G. D. (2004), Noh (2001), Park, H. Y. (2002), and Park, S. H. (2002) are cases in point. While digital animation research studies are very rare, it is important to note that most research works are in this academic area, suggesting that digital animation is emerging as one of the main research topics. Since these academic works are limited mostly to the examination of the digital industry status, there needs to be studies that provide the opportunity to draw a map of the entire digital industry and analyze significant characteristics of this industry.

As is briefly reviewed above, not only does previous research mainly examine the problems and weak points of Korean animation that have been revealed over a long history of animation, but few research studies focus on the newly observed features such as digital animation. Due to these reasons, this current research focuses on providing a comprehensive outlook that includes the digital industry and policies as well as mapping out the features of digital animation.

Structure of Research

This dissertation is composed of seven chapters. The first three chapters provide the basic background information of this research. The remaining five chapters show the findings, the analyses, and the conclusions.

Chapter 1 explains research objectives and then briefly reviewes previous research on animation, suggesting the reasons why this research has chosen to examine digital animation.

Chapter 2 deals with theoretical and research frameworks and is divided into two parts. These two theoretical frameworks are explained for the purpose of analyzing digital animation.

The first part discusses globalization, focusing first on providing the definition of globalization. Then it presents the main characteristics of political and economic areas respectively: changes in the role and status of nation-states and regionalization. These are characteristics that are expected to be observed within the Korean digitalized animation industry.

The second part discusses cultural industries. It explains the origin of its definition first. Then, it presents the definition created by UNESCO and the key points provided by current research works. In addition, the cluster approach and the One Source Multi Use strategy are described as the practical frameworks with which to analyze Korean digitalized animation.

Chapter 3 presents research questions and methods. There are two Research Question Groups (RQGs), and each one has three research questions. The first RQG is about industrial characteristics of digital animation, and the second one focuses on support programs for digitalized animation. Then, propositions, assumptions and the research procedure showing the direction of this research follow.

Two approaches are chosen for this research because of the qualitative nature of this research: document data analysis and in-depth interviews. The document analysis

section presents the type of data that are collected and reviewed within the periods of this research project. Then, the in-depth interviews section presents the list of respondents and key points that are mentioned in the interviews.

Chapter 4 is the result of Research Question 1-a of RQG 1. It presents key points of related industries such as the animation industry, cultural industries, and the information and communication technology industry of Korea, as well as why digital animation appeared and developed in Korea.

Chapter 5 is the result of two research questions, 1-b and 1-c in RQG 1. It presents the current status and analyzes newly observed characteristics of the digitalized animation industry. Moreover, the co-production system is analyzed from the perspective of regionalization.

Chapter 6 presents the result of RQG 2. This chapter examines policy and supporting systems made and managed by both national and local governments. After explaining the current supporting systems of the national government, the movement of the local government is analyzed through the Chuncheon case. In particular, the Chuncheon case is examined from the perspective of regionalization.

Chapter 7 presents summary results and conclusions.

Chapter 8 provides limitations of this study and proposes implications for future research.

CHAPTER 2

LITERATURE REVIEW

This chapter is composed of two sections: globalization and cultural industries. Theories of globalization and cultural industries are employed in order to provide the theoretical background for this research and are used to examine whether the Korean digital animation industry, as a part of this country's cultural industries, shows characteristics of globalization.

Theories of globalization are reviewed first. After defining globalization, key features of political and economic areas, all of which are expected to be seen in the Korean digital animation industry, are explained separately.

Next, cultural industries are examined. The definition created by the Frankfurt School and UNESCO is introduced. Then the concept of modern cultural industries is explained. In addition, new practical strategies, applied to the development of the animation industry, are presented.

The Theories of Globalization

The globalization theory section principally consists of two parts. One is an overview of globalization including the definition and two crucial factors that hasten globalization. The other deals with two dimensions of globalization: political and economic.

Overview: General Characteristics of Globalization

On the whole, globalization is recognized as a concept elusive of definition, but nonetheless used extensively. Since the notion of globalization has been discussed in diverse areas—for instance, in politics, economics, culture, technology and environment—this discussion takes for granted that viewpoints on globalization are slightly different from one another. Therefore, this research needs to start with a clear definition of globalization as well as with key issues in the globalization theory. This overview has two sections. First, it elucidates definitions of globalization provided by several scholars. Second, it examines two points recognized as catalysts that accelerate globalization: communication technologies and the multi-national media companies.

Definition of Globalization

Defining globalization has been a subject of intense debate. Even though many scholars have expressed their opinions about the concept, defining globalization is still under discussion partially because globalization is mentioned and used in almost every area including the mass communication field. Moreover, as Robins (1997) mentions, this debate continues because "globalization is about the dissolution of the old structures and boundaries of national states and communities" (p. 12). Beck (2000), who looks at globalization from a political point of view, insists that it is necessary to define globalization by areas (p. 19). This laborious task has been tried endlessly by many scholars.

Some scholars such as Thussu (2000) and Beck (2000) try to categorize definitions of globalization. Thussu (2000) insists that definitions of globalization can be categorized by characteristics: liberal interpretation (e.g., Francis Fukuyama), economic

conception (e.g., Kenichi Ohmae), Marxism and world-system theorists (e.g., Immanuel Wallerstein), and sociological interpretation (e.g., Anthony Giddens and Arjun Appadurai) (pp. 76-78). Beck (2000) also makes his own classification. Unlike Thussu, Beck divides viewpoints about globalization into two groups: on one hand is the group with the concept of nation-states, world-system, and capitalism, and on the other is the group based on cultural theory. The former is represented by Immanuel Wallerstein, Robert Gilpin, David Held, etc. while the latter includes Roland Robertson, Arjun Appadurai, Mike Featherstone, and so on (p. 31).

In terms of defining globalization, it is broadly agreed that definitions made by Anthony Giddens as well as by Roland Robertson are the starting points. Waters (2001) contends that "formalization" and "specification" of globalization is achieved through Robertson's definition (p. 2) while Hesmondhalgh (2002) postulates that their attempts are grounded in the shift of international communication that has been expedited by the development of mass communication technology (p. 174).

The concept of globalization made by Giddens (1990) is based on modernity, in as much as he relates modernity to the Westernization of the world and hence globalization. Assuming globalization is intrinsically bound up with modernization (p. 14), he emphasizes that the modern era is experiencing "the intensification of worldwide social relations which link distant localities in such a way that local happenings are shaped by events occurring many miles away and vice versa" (p. 64). Due to the advanced communication technologies, "relations between local and distant social forms and events are more and more stretched" (p. 64). Giddens pays attention to this stretched process of globalization, by which different social contexts and regions become

networked across the globe. In addition, he clarifies globalization even more through suggesting four institutional dimensions: world capitalist economy, nation-state system, world military order, and international division of labor (p. 70).

Robertson offers a different perspective by criticizing that "globality or what Giddens calls globalization is simply an enlargement of modernity" (1992, p. 142). He explains that the term globalization, which was not ubiquitous until the 1980s, is "a concept [that] refers both to the compression of the world and the intensification of consciousness of the world as a whole" (p. 8). Unlike Giddens, he insists that globalization should not be dealt with solely in terms of modernity, for he admits that globalization has features that are difficult to explain simply by modernity. In other words, what Robertson suggests is that Giddens neglects cultural aspects of globality—especially non-Western cultures which are heterogeneous rather than homogenous.

Moreover, Robertson points out that Giddens' view sets limits on the idea of the nation-state system. He says that "Giddens is restricted precisely by his having to center the current world system within a discussion of the global state system...[and] ends-up with a map of what he reluctantly calls the world system, which is centered upon his conflated characterization of the rise of the modern state system" (Robertson, 1990, p. 24).

Referring to the opinions of these two scholars, Waters (2001) states that Robertson visualizes globalization as "the relativization of individuals and national reference points to general and supra-national ones" whereas Giddens thinks globalization is "intrinsically bound up with modernization" (p. 14).

If what these prominent social scientists say about globalization is considered as the foundation for further research, what Tomlinson (1991, 1997) lays out can be explained as an effort to make the characteristics of globalization clearer. His conceptualization of globalization is, on the whole, based on a comparison between cultural imperialism and globalization. He basically thinks of globalization as a process, explaining globalization with "interconnection" and "interdependency." But these notions of interconnection and interdependency do not have any intention (1991, p. 175). That is, he implies that globalization, unlike cultural imperialism, results in unintended consequences.

More than anything else, Tomlinson's opinion is constituted on the comparison of cultural imperialism with globalization on the basis of culture. As a base to prove a similarity between cultural imperialism and globalization, he mentions the ubiquity of Western cultural goods around the world and the centrality of capitalism as a cultural influence. But, at the same time, he also provides several reasons why cultural imperialism and globalization should be differentiated. First, the cultural influence of globalization, when it is conceptualized in "dialectical terms," is more complex and is different from "the sort of linear paths that cultural imperialism predicts." Second, Tomlinson adds that the process of globalization is "decentered" so that "new patterns of advantage and disadvantage" are hard to explain simply by cultural imperialism (1997, p. 188).

But, McQuail's concept on globalization is considerably different. McQuail, who deals with globalization as a part of mass communication theory (2000), focuses on the point that the term globalization is used almost the same as either "westernization" or

"Americanization" (p. 221). He contends that an imbalanced and unequal flow of information by mass media, which mainly has "western values," makes "global culture" "western culture" or "American culture." He strongly emphasizes the role of new media in this unequal information flow (p. 496).

In addition to these attempts, several more scholars define globalization in their own ways. Mohammadi (1997), who indicates "free flow of information" as one of the crucial functions in globalization, says that globalization is normally recognized as the way to stretch relations between "power and communication," but his opinion is focused more on the dispersion of American cultural products and entertainment in the name of free flow of information (p. 3)

Boyd-Barrett's (1997) definition differs slightly. Commenting that more people think globalization is related to transnational corporations and its interrelatedness to local economies (p. 11) and that locality is totally subject to "transnational and global forces" (p. 12), he defines globalization as the "confluence" of diverse "disciplines" and "discourses" (p. 13). Notably, he does not miss the importance of the media's role in intensifying the exchange these disciplines and discourses have over the physical nation-state borders in deciding the meaning of globalization (p. 21).

Meanwhile, several scholars try to categorize globalization based on more specific characteristics. Scholte (2000) defines globalization by several key points. He assumes that it is difficult to reach a conclusion ever after so much debates on globalization because of ambiguous definitions. Therefore, he insists that globalization can be defined as five formats even though there are overlapping parts in these five formats. They are internationalization, liberalization, universalization, westernization or

modernization, and deterritorialization (pp. 15-17). Among these five features, he places more emphasis on deterritorialization and coins the term supraterrioriality, which he thinks leads to a reconsideration of "some of our assumptions about social relations, particularly in relation to space" (p. 42).

Waters (2001), a sociologist who points to Giddens and Robertson as important figures in defining globalization, mentions that it is not necessary to think of globalization as homogenization or integration (p. 192). Instead, he maintains that globalization is "a social process in which the constraints of geography on economic, political, social and cultural arrangement recede, in which people become increasingly aware that they are receding and in which people act accordingly" (p. 5). In order to explain this distinction more precisely, he provides three frames for globalization as follows:

> a) Economic trends towards marketization, that is, freedom from command, constraint and status and class monopolization;
> b) Political trends towards liberalization and democratization, the deconcentration of power;
> c) Cultural trends towards universalization or the abstraction of values and standards to a very high level of generality that will permit an extreme level of cultural differentiation (p. 22).

Steger (2003), who expresses globalization not as a process but as a set of processes, claims that globalization "operates simultaneously and unevenly on several levels and in various dimensions" (p. 36), and describes it as the processes that "create, multiply, stretch, and intensify worldwide social interdependencies" (pp. 12-13). To clarify the notion of globalization, he provides four points as the essential qualities, which are as follows:

a) Globalization involves the creation of new and the multiplication of existing social networks and activities that increasingly overcome traditional political, economic, cultural, and geographical boundaries;
b) The quality of globalization is reflected in the expansion and the stretching of social relations, activities, and interdependencies;
c) Globalization involves the intensification and acceleration of social exchanges and activities;
d) The creation, expansion, and intensification of social interconnections and interdependencies do not occur merely on an objective, material level. Their awareness of the receding importance of geographical boundaries and distances fosters a keen sense of becoming part of a global whole (pp. 9-12)

Particularly, when he lists the third essential quality, he mentions the role of satellites and the Internet because satellites work like the media by providing "real-time pictures of remote events" with the Internet providing distant information in an instant. That is to say, he maintains that globalization actually relies on the communication technologies.

According to Went (2000), there are four aspects that explain globalization that are primarily based on economic viewpoints (pp. 8-9). The first is an increase in the amount of closely connected global markets. The second is the growth of multinationals, that is, transnational companies. The third is supranational institutions such as "unelected world governments" [e.g., G7, IMF (International Monetary Fund), WTO (World Trade Organization), etc.] and "regional blocs" [e.g., EU (European Union), NAFTA (North America Free Trade Agreement), etc.], and the last one, which Went emphasizes the most, is macroeconomic policies. This emphasis means that the power of finance or money is paramount in this age of globalization.

Cochrane and Pain (2000) examine the characteristics of globalization as interconnectedness, multidimensional process, and double-faced features—both positive

and pessimistic traits—through comparing Hutton, Mulgan, Wiseman, and Giddens' point of view. They define globalization by distinctive features (pp. 15-16). The first one is the "stretched social relations," which means that relations are stretched over the barriers of nation-states. Second, they point to the "intensification of flow," meaning that social relations are not only stretched but also intensified. The third feature, "interpenetration," based on the increased extent and intensity, culture, economic, and social exchange between the local and the global, is significantly observed. The last feature is "global infrastructure," meaning that globalized regulations and control systems are networked and operated.

Mittelman (2000), who also recognizes Giddens, Robertson, and Harvey as important scholars for defining globalization, says that definitions of globalization can be explained by two features. The first feature involves interconnections or interdependence, a rise in transnational flows, and an intensification of process, while the other refers to the compression of time and space.

As reviewed above, several scholars define globalization in their own ways, but either interconnection or interdependence for the most part is pointed out directly or implied as the key point of globalization. Furthermore, two features are mentioned as crucial factors to accelerate the globalization process: one is the development of communication and information technologies and the other is the global expansion of multi-national media corporations.

The Development of Information and Communication Technologies

In terms of communication technologies, the influence on cultural and economic areas frequently is discussed. Wells, Shuey, and Kiely (2001) mention technological

advancement as one of the most critical factors accelerating the development of globalization from the 1990s onward (pp. 10, 14). Moreover, Waters (2001) categorizes technological development as miniaturization, personalization, integration, diffusion, and autonomization (pp. 201-202), and attributes diffusion of consumerism and expansion of cultural exchange to influences from which technological advancement give birth (pp. 203-204). In addition, Tehranian (1999) focuses on the fact that information and communication technologies influence the cultural part of globalization. He says that today's technological development helps local cultures to establish their own networks and to build their own voice. Similarly, Crane (2002) analyzes the cultural impact made by media technologies. According to this scholar, the digital revolution, made possible through technological development, enables the consumer to access more information and furthers our understanding of local and regional cultures through increasing exchange. He also mentions that it is getting harder to control cultural exchanges beyond national borders and that the dependency on media conglomerates may be increasing (p. 18).

In addition to these analyses of the cultural influences of communication technologies, there are several findings with regard to economic and financial influences. Yeates (2001) refers to the operations of transnational capitals, and Went (2000) has a similar point, i.e., the influence of financial areas (p. 5, 54). Went explains that the development of information technologies enables the real-time flow of finance, enables corporations to run their businesses simultaneously anywhere in the world, and forces policies to be changed. But, he makes clear that technological development is not the most important aspect of globalization, saying that technologies make possible only certain phenomenon, mentioned above such as the real-time flow of finance (p. 62).

Likewise, Sussman and Lent (1998) and Negrine (1997, p. 57-58) have a similar opinion, suggesting that technological development is not a decisive factor, but rather depends on the use to which they are put.

Meanwhile, Throsby (2001), who also thinks technological development profoundly influences the economic area, examines two categories: the production side and the demand side. He emphasizes "the effect of computer technology and advances in video and sound reproduction on the process of artistic creation and on the nature of products produced" in the production side while on the demand side, he asserts "scale economies in consumption in some art forms reduce the marginal cost of adding a consumer to close to zero, and make available a far wider range of consumption experiences to individual consumers in the market" (pp. 118-119).

Thussu (1998), however, perceives the effects of technological developments in a different way. He says that the globalized technologies are necessary for developing a global public sphere. Advanced networked technologies, from his perspective, have an impact on issues of democracy, human rights, gender and ethnic equality, the environment and sustainable developments, and make citizens aware of the wider world (p. 4).

Meanwhile McQuail (2000) and Negrine (1997) mention the negative side of technological development. McQuail says that the content, which is included in media technologies, is inclined toward westernized materials (p. 226) while Negrine indicates that national sovereignty and cultural integrity may have problems (p. 56).

As reviewed above, several scholars focus on cultural and economic influences that are caused by information and communication technologies. It is of importance to

look at information and communication technologies from cultural and economic perspectives for this dissertation. It is related to two reasons: the first reason is digital animation is a part of cultural industries. That is, digital animation is a cultural product being industrialized and commercialized. The second reason is Korea shows a significant development in information and communication technologies industry. Therefore, the development of information and communication technologies accelerating globalization is expected to work as a theoretical background to explain the rise of digital animation.

The Intensification of Multi-National Media Corporations

The second feature, which works to develop globalization at an accelerated pace, is multinational corporations (MNCs). There are numerous studies on MNCs and most of them connect MNCs' power to nation-states' authority directly or indirectly by analyzing their monopoly and M&A (Merger & Acquisition).

Several scholars focus on MNC's capacities to go beyond the scope of nation-states. For example, Thussu (1998) insists that MNCs allying with international organizations such as the World Bank influence the erosion of the economic powers of nation-states (p. 3).

While not new, this phenomenon has become more significant since MNCs began to manage economies of scales that became possible through mergers. Thompson (1995) implies that the power of MNCs is more influential than that of nation-states by asserting that MNCs fostering their influential power through mergers and acquisitions are the greatest characteristic of global communication.

In the meantime, scholars who focus on major media companies hold fast to a critical viewpoint. Bagdikian (2000) is a case in point. Although he deals with several

foreign companies, his main concern lies with the US media giants. He analyzes not only the influences coming out of the market oligopoly of a few major companies which own diverse types of media through acquisition, but also the processes by which the market oligopoly is aided by the national government. In addition to these analyses, he insists major media companies affect politics through various opinions and information.

Similar points are made by Schiller (1992, 1998) whose research focused primarily on criticizing the capitalist system and the domination of the US. Identifying media conglomerates as symbolic factories, he maintains that media companies that enlarge their scales through merger, consolidation and capital expansion form a concentration of capital and media sectors that in turn keep the US (i.e., capitalism) alive.

While Bagdikian's focus is primarily on the US media moguls, the subjects of Herman and McChesney (1997) and McChesney (1998) are expanded to world media conglomerates. They deal with corporations that have grown through deregulation, commercialization and advertisements, such as Disney and News Corporation with their strong influence on the world media market. In particular, by reflecting on certain characteristics from the 1990s, such as the rapid development of media technologies and the appearance of convergence, they explain that media conglomerates exercise greater powers on the global media market. But, similar to Bagdikian, they assert that media conglomerates can intensify their private power, thereby controlling media content and inevitably weakening the authority of public media and nation-states.

Gershon (1997) includes case studies of certain media companies, such as Disney and News Corporation. These case studies reveal marketing strategies and organizational structures. In addition to these case studies, he focuses on explaining reasons for the

growth of media companies. For instance, he suggests that deregulation and privatization are important factors that contribute to how media companies can grow to the extent of changing structures of telecommunication and mass communication. Moreover, he enumerates certain marketing strategies—e.g., foreign direct investment (FDI) and international mergers and acquisitions—for opening up and holding the international media market.

Hoós (2000) also examines the influences of MNCs economically and politically. He says that MNCs work as economic prime movers of globalization and bring about changes in the financial market, the internationalization of business strategies, and the diffusion of technologies (p. 41). But, more importantly, he contends that the enormous power of MNCs influences the political arena to a degree that it weakens the nation-states' role while exercising their power on policy decision-making procedures.

Through a review of definitions of globalization as well as two features that accelerate the globalization process, it is possible to draw some common points. The first point is that the matter of connectedness, that is, interconnection beyond the borders between countries, is significantly deepened. This interconnection is sometimes mentioned as interdependency and is intensified by information and communication technologies and by multinational corporations. The second characteristic of globalization is the role of technology, to put it more specifically, the technology of communication. It is commonly pointed out that communication technologies are not a main factor in the process of globalization, but rather a critical catalyst to stimulate the process of globalization. Third, the role and ability of multinational corporations (MNCs) are certainly intensified and their influence is spreading throughout the world. The

question still remains as to whether the power of nation-states is reduced or, instead, MNCs are replacing nation-states and taking over their role. Nonetheless, there is no room for argument that MNCs are growing more than ever before.

In addition, it needs to be noted that the information and communication technology and the multinational corporations are also interconnected. Developing new technologies is generally achieved by MNCs because they possess enough capital to invest. Also, MNCs can grow by developing and dominating highly advanced and profitable information and communication technologies. Thus, this interconnection can accelerate the globalization process.

Dimensional Characteristics of Globalization

Accordingly, to advance a clearer understanding of globalization, it is necessary to turn from a general concern with its conceptualization to a closer examination of key aspects of activity and interaction from which global processes evolve. For this reason, key points in political and economic areas of globalization are reviewed in the next section.

The necessity of conceptualizing globalization by means of categories is pointed out by several scholars. Thompson (2000) implies this necessity by noting that globalization has a variety of meanings and can be applied to many areas of contemporary life (p. 88). Waters (2001) also points out, for the purpose of defining globalization in detail, that one can conceptualize the characteristics of globalization by examining the main areas of social life: economics, politics, and culture (p. 17).

More specifically, categorization of the key points of globalization into groupings of politics and economics is crucial to an examination of Korean digitalized animation.

Such an analysis will provide evidence that Korean digitalized animation is indeed being globalized.

Previously, a categorical analysis for defining globalization has been attempted by several scholars. For instance, Waters (2001), similar to what Yeates (2001) provides, focuses on and explains four areas: economic, cultural, social and political interconnections and processes (p. 4). Wells, Shuey, and Kiely (2001) point out that a definition of globalization can be achieved through an examination of the dimensions of politics, culture, technology, finance, national security, and ecology (p. 3).

Each area—political, economic, and cultural—may possess several characteristics that can be listed, but the role of nation-states within the political area and regionalization within the economic area are exclusively reviewed for this research since it is expected that these characteristics are linked to the Korean digital animation industry.

Political Area: Changes in the Role and Status of Nation-States

Globalization in the political area has several issues that can be suggested as the key points of political globalization. The identity issue of nation-states, the change in their influential power, and the shift in roles of international organizations are generally proposed and discussed. This research focuses on the role and status of nation-states and reviews research that deal with the role of nation-states. Because of this focus, this research analyzes policy organizations and their support programs in Korea.

Steger (2003) defines political globalization as the extension and intensification of political relationships around the globe. Those political relationships mean that the issues of one country become the issues of the world, while the issues of the world such as international trade agreements are also crucial issues to each country. Moreover, Steger

insists that the sovereignty of nation-states, the role and impact of international organizations, and regional and global governance are the critical points that act as the predominant features of political globalization (p. 56). In particular, he emphasizes the blurring borders between domestic and international politics (p. 64), and explains that they are caused by economic units that work beyond the authority of nation-states under the situation of the close interconnectedness between politics and economy (pp. 62-63).

Yeates (2001), who defines political globalization as "the changing global context of political awareness, processes and activity," envisions its features as two types: one is the expansion of political freedom by economic globalization and the other is the solidification of political interaction at the international level (pp. 7-8). Unlike Steger, Yeates pays attention to several factors including economics in his analysis of the shifts in political forms. That is, Yeates maintains that business and industry, similar to IGOs (International Governmental Organizations) and NGOs (Non Governmental Organizations), perform as non-state actors in taking alternative frameworks and incurring not only the collapse of the highest level of political authority that nation-states have enjoyed so far, but also ultimately the end of national politics as well (pp. 9, 12).

Went (2000), however, has a slightly different opinion. Rather than focusing on the point at which the authority of nation-states is reduced, he calls attention to changes in the roles of nation-states. As an example, he shows that nation-states devote themselves more to works like protecting banks to provide against emergencies, restricting immigrants, rounding up illegal workers, and investing in infrastructure-related areas on a large scale. Such works make nation-states much more attractive for

investment while they curtail "social and collective programs" which nation-states have undertaken for a long time (p. 50).

McGrew's ideas (2000) are similar to those of Went's (2000). Went, through his listing of the institutionalization of transnational political connection and of the growth of new authorities such as the WTO and the EU as characteristics of political globalization, asserts that the power and authority of national governments are reconfigured solely in the multi-layered global governance; therefore a nation-state in this context can be called the "reflexive state" or "network state" (p. 164). The reflexive state thus reconstitutes its power by establishing a network to connect local systems to regional and global systems of governance. This process implies that the role and authority of nation-states are changed but not weakened. Hamelink (1993) also focuses on the change in the role of nation-states by insisting that nation-states and transnational corporations, as prime movers of current international relations, benefit from their mutual reinforcement of the state-centric system (p. 388).

Cerny (1996), however, places more importance on the changes in nation-states. Nation-states are transforming because of transnational interdependence and should be looked at not as a simple type of civil association but as "residual states" that include the role of enterprise associations that promote economic activities (p. 209). The concept of residual states is explained by two new movements: one is the way a nation-state itself works by changing to the promotion of economic activities and the other the process by which a nation-state promotes the formation of international linkages. The appearance of residual states points to their having evolved from the economic competition in the world as well as having changed the role of nation-states by economic factors.

Sánchez-Ruiz (2001) is particularly important because he deals with the role of the nation-state in terms of cultural industries. Through examining the cultural industries of Mexico after joining NAFTA, he suggests that the role of the government is changed. Nonetheless, Sánchez-Ruiz insists that cultural industries are too important socially to be managed only by the "invisible" hands of market forces; he maintains the crucial role of government in cultural industries but emphasizes that its role should not be focused on protecting but rather on developing cultural industries.

Waters (2001), similar to Sánchez-Ruiz (2001), focuses on one country in order to show that the role of nation-states has changed. He indicates that the time when the US enjoyed dominant and unique power has already passed and, instead, the US definitely needs to ally with other countries (p. 148). He insists that there are several international organizations that are taking over the role of nation-states and have significant impact around the world mentioning that, as of 1992, nearly 15,000 organizations exist (p. 149). This observation implies that the role of the nation-state has changed and is now dependent on the international political situation.

Morris and Waisbord (2001) also mention the changed role of nation-states, but they focus instead on the point that nation-states are still important in the age of globalization. They contend that the role and function of nation-states cannot disappear even though some changes are apparently made by phenomena such as MNCs, international organizations, and the technological development of mass media. Case studies of several countries in diverse media areas such as Kim and Hong (2001) suggest that there are at least several areas that only governments of nation-states can manage. By analyzing the changes of Korean media industries that have occurred during the

economic crisis, they confirm that market principles emerge as the key factor in affecting media industries and that the economic environment leads to deregulation in media policy. What they also point out is there are some parts only the nation-states can handle such as financial support and state investment in media industries.

As reviewed above, several scholars insist that the changed role of nation-states is one of the key issues in the political area of globalization. Particularly, this dissertation will consider Sánchez-Ruiz (2001), Waters (2001), and Kim & Hong (2001), in a sense that they deal with cultural industries and media industries of some countries and provide evidence that a primary role of nation-states is to bring about changes in reality.

This research is based on this point, that is, the role of nation-states has changed. To examine this point of political globalization, this research assumes that the national government represents the nation-states first. It is based on the conceptualizations of Sánchez-Ruiz (2001) and Kim and Hong (2001). They regard nation-states as national governments of Mexico and Korea. This research then focuses on explaining the current organizations and major support programs. Utilizing this practical status of cultural industries policy, this research examines the recent movements of the national government of Korea in order to provide evidence that the role of the nation-state in bringing up digitalized animation is explained by the key point of political globalization.

Economic Area: Regionalization

The conceptual definition of economic globalization is not significantly different from that of political globalization. As McQuail (2000) mentions, the development of technology and the spread of the Internet play critical roles in globalizing the world, but

one thing that is more important and that pushes the notion of globalization as "the most immediate and enduring force" is the economy (p. 217).

There are several crucial factors that intensify and expand the interconnection of the world such as the increase of capital flow and the immenseness of multinational corporations through mergers. These are noted by several scholars—such as Steger (2003), Hirst and Thompson (1999), Yeates (2001), and Ohmae (1995a, b)—who characterize the global economic order as the intensification of economic relations.

Steger (2003) insists that this economic globalization is the basis of "the internationalization of trade, the liberalization of financial transactions, the deregulation of interest rates, and the privatization of government-owned financial institutions" (p. 42). And, Went (2000) says that the changes in the system of capitalism create "a more intense interweaving of economies with increased interdependence" (p. 22).

Moreover, Ohmae (1995a, b) points out that changes in the world economy make the economy of nation-states no longer relevant, with market capitalism creating "cross-border civilization." He focuses on the appearance of "region states" and the economic activity that is achieved across national borders. Based on the logic that interactions of global economies are so complex and affect the businesses of participants, Ohmae explores the emergence of region-states. He supports his theory of region-states with evidence from several regions in the world, Kansai is one of them. Kansai is one of eleven regions in Japan and includes three metropolis, Osaka, Kyoto, and Kobe. The economy of this region is larger than that of the whole of Canada. He maintains that Kansai should be a region-state having a self-propelled engine of growth for two reasons: one is that this region is large enough to contribute to the world's economy and the other

is that local regions like Kansai are more effective in coordinating with large-scale supranational regions such as ASEAN (2000, pp. 136-137).

Through the Kansai case, he maintains that a region-state is not a political but rather an economic unit. He also explains that a region-state is geographically within the borders of an established nation, but its activities occur across physical borders and establish its own global economic network.

In practice, regional economic globalization can be considered as either political or cultural area. For example, Hettne (1999) explains the definition of regionalism and its relationship with globalization by focusing on politics. Yet, since both cultural and political globalization are totally based on the current world economic system which is capitalism and are also interconnected with factors of capitalism (i.e., corporations and markets), it is more appropriate to explain regionalization in the economic area.

Yeates (2001) also looks at regionalization from an economic perspective, as evidenced by the concept that regionalization is "a market-induced process" (p. 77). One of his crucial observations is that globalization and regionalization are "complementary phenomena" (p. 77), both driven by the same market principles. Thus Yeates notes that the difference between regionalization and globalization is that regionalization works at a different level.

Based on this distinction, Yeates goes on to insist that world capitalism is capable of operating at diverse levels, that is, at international, regional, sub-regional, and national levels. As an example of this regionalization, Yeates elucidates that one regional group is taking shape in East Asia; as a result, Japan and NICs (Newly Industrialized Countries,

like Mexico, Singapore and Korea) have grouped together as allies to counter ever more aggressive US demands for market-opening measures (p. 81).

Fuchs (1996) also stresses the importance of regionalization. There may be, he insists, some conflicts between regional ties and global ties, but it is important to combine globalization and regionalization to develop regional economies in the long term (p. 262). He clarifies the advantages that regional networks can bring and the ideal type of multimedia industries when both global and regional network are combined. Through suggesting global regions as the most ideal type, he provides some evidence that a combination of regional and global ties make available the most favorable conditions for the development of regional economies and for the coexistence of globalization and regionalization.

Mittelman (1999, 2000) enumerates the spatial reorganization of production and the interpenetration of industries across borders as important characteristics of globalization, thereby implying a relationship between globalization and regionalization by insisting that economic globalization currently transcends territorial states. But, to differentiate from a concept seen in history, he insists that the new regionalism truly has worldwide reach and connects more regions with better linkages. He also divides the concept of regionalization into macro-regionalism (e.g., Asia-Pacific region and the EU) as well as sub-regionalism (e.g., the city-states of Hong Kong and Singapore). In particular, among case studies, the Asian region is highlighted as the one that possesses strong bonds of kinship and culture in geographically close areas, thus enabling the saving of transaction costs as well as offering interpersonal trust that accelerate well-connected regional businesses (2000, p. 122). His analysis of regionalization in Asia

mainly comes from the explanation of a "flexible specialization system" mentioned in his previous research (1999). That is, in regions like Asia and Latin America where NICs exist, flexible production increases exponentially in electronics and computers, thereby leading to the development of regional industries (p. 38).

As reviewed above, regionalization is mentioned by several scholars as one of the key issues in economic globalization. While some scholars such as Ohmae (1995a, 1995b, 2000) focus on regionalization that occurs within the borders of nation-states, others such as Yeates (2000) pay attention to regionalization that takes place across borders of nation-states. This distinction implies that regionalization not only is driven at diverse levels such as at the sub-regional level or at the macro-regional level, but that the subjects that drive this regionalization can be diverse such as local governments, MNCs, and international organizations.

This research is based on this regionalization and assumes that regionalization is driven by diverse forces. Thus, this research focuses on analyzing the type of regionalization and the movement in order to establish regional coordination as well as economic globalization.

Cultural Industries in the Age of Globalization

The second theoretical framework for this research is cultural industries because (a) animation is generally recognized as one of the cultural industries and (b) this research examines industrial characteristics of digitalized animation. The cultural industries section principally consists of two parts. The first focuses on the definition of cultural industries. It purports to explain the origin of cultural industries and to provide

modern concepts of cultural industries. The second point explains two strategies that have been introduced in Korea for the purpose of developing cultural industries.

One of the main reasons why cultural industries develop rapidly and attract attention is because of their relationship with communication technologies. As Park (1995) puts it, cultural industries clearly work as software that can fill communication technologies that work as hardware.

The potential of cultural industries is also noted by several scholars. For instance, Throsby (2001), who thinks cultural industries will be on the cutting-edge in the 21st century, mentions that cultural industries can play an increasingly important role in developing communication technologies. Additionally, he expects cultural industries will raise not only creative thought and expression but also improve employment levels (p. 134). Corral (1995) points out the necessity of research on cultural industries by citing similar advantages that Throsby indicates above while Pratt (2000) emphasizes the future role of cultural industries by insisting that cultural industries will dominate the world economy. Yet, because the concept of cultural industries when it was created is different from what modern scholars use, one needs to mention the origin of cultural industries and to review their key points.

Culture Industry: The Origin of Definition

The concept of cultural industries appeared in the early 20th century. "The culture industry" was purported to condemn the capitalist system. The term itself appeared in the 1940s. Adorno and Horkheimer, who were members of the Frankfurt School famous for critical theory, used this term in the *Dialect of Enlightenment* published in 1944. They focused on the industrialization of mass produced culture and the economic rules behind

the culture industry. They postulated that the culture industry played a highly manipulative role in modern society and worked to control or subvert opposite consciousness, resulting in the removal of any threats to capitalism. That is, the culture industry used culture as a vehicle for rulers' ideologies and provided the means to keep capitalist values in modern society (Adorno & Horkheimer, 1979; Cook, 1996; Horkheimer & Adorno, 1944, 2002). According to Negus (1997), their argument ultimately concludes that cultural consumption leads people to perform passive and obedient types of social behavior because their activities are determined to be a part of the culture industry (p. 73).

Cultural Industries: The Appearance of UNESCO's Concept

The concept of the culture industry forwarded by Adorno and Horkheimer has changed because the division between high arts and popular culture has become blurred (Throsby, 2001, p. 117). This idea was taken by the United Nations Educational, Scientific and Cultural Organization (UNESCO). In 1982, UNESCO, which already recognized the importance of culture and hosted the first intergovernmental conference issuing cultural policies in 1970, published a book, *Cultural industries: A challenge for the future of culture* that dealt with cultural industries at an international level. This book covered several issues such as definitions, influences, and policies. In particular, the introduction presented a practical definition of cultural industries (Pratt, 2000). Essentially, UNESCO regarded cultural industries as producing, storing, and distributing cultural goods and services on a large scale based on economic considerations (UNESCO, 1982a, p. 21). UNESCO tried to draw a distinction from the opinions of Adorno and Horkheimer, but took their work as the starting-point, accepting the concept of "cultural

industry" with a view to explain the importance of culture activities being swayed by major communication companies (Negus, 1997, p. 77).

In addition, UNESCO presented a practical case study on cultural industries (1982b). Focusing on influences of major communication corporations on films and television, UNESCO concluded that multinational corporations (MNCs) already focused since before the 1980s on conglomeration and trans-nationalization.

Presently, UNESCO states that cultural industries "...combine the creation, production and commercialization of contents that are intangible and cultural in nature.... The notion of cultural industries generally includes printing, publishing and multimedia, audio-visual, phonographic and cinematographic productions, as well as crafts and design...."[2]

UNESCO's concept of cultural industries has several important meanings. First of all, UNESCO calls people's attention to cultural industries and products internationally and, at the same time, underscores the importance of cultural industries by emphasizing their economic and cultural advantages. Second, definitions of cultural industries are channeled away from criticizing the capitalist society and economic system toward showing the advantage of cultural industries for ensuring cultural diversity and economic development. This is the difference between the Frankfurt School and UNESCO. Third, the concept laid out by UNESCO works as the key point when countries make their own definitions of cultural industries. Korea's definition is also similar to UNESCO's definition. For example, the Cultural Industries Promotion Basic Act defines cultural

[2] This is at UNESCO's site explaining cultural industries. Available at http://portal.unesco.org/culture/en/ev.php-URL_ID=18668&URL_DO=DO_TOPIC&URL_SECTION=201.html

industries objectives as such: to plan, develop, produce, distribute and consume cultural content and its related service.

The Modern Concept on Cultural Industries

The arguments about definitions provided by Adorno and Horkheimer as well as UNESCO have continued to be a central topic of debate because their definitions are not practical but rather theoretical. Therefore, several scholars pay attention to the practical side of cultural industries. This is pointed out by Pratt (1977) and O'Connor (1999) when they review cultural industries. Both of them concentrate on small-size businesses and the localization of cultural industries. Cunningham (2002), who also identifies the problem of defining cultural industries and the validity of data collected for cultural industries research as well, distinguishes cultural industries from creative industries by insisting that the concept of cultural industries stems from the level of nation-states while the notion of creative industries is developed at the global and local/regional level.

Caves (2000) also differentiates between cultural industries and creative industries by using "contract theory" with a view to explaining creative industries. Hartley (2005) emphasizes the concept of creativity in order to separate creative and cultural industries. That is, the development of a new modern economy follows the process of infrastructure → connectivity → content → creativity, with creative industries being placed in the status of creativity. In this way, according to Hartley (2005), the value of creative industries is extended to the social development of a new model. To make the difference simpler, he adds that Americans define culture in market terms whereas Europeans look at it in national terms. He provides categories in order to show the difference of each term. They are categorized as follows: a) creative industries are largely

characterized by the nature of labor inputs, and they include advertising, architecture, design, interactive software, film and TV, music, publishing, and performing arts; b) copyright industries are defined by the nature of asset and industry output, and they include commercial art, creative arts, film and video, music, publishing, recorded media, and data-processing software; c) content industries are defined by focus of industry production, and include pre-recorded music, recorded music, music retailing, broadcasting and film, software, and multimedia services; d) cultural industries are defined by public policy function and funding, and include museums and galleries, visual arts and crafts, arts education, broadcasting and film, music, performing arts, literature, and libraries (p. 30). But, he is not clear in explaining about how these categories are applied to countries in the world.

The importance of creative industries is that this concept is used to improve the economy at the local level. In order to generate employment, resuscitate local culture, and better the living environment, creative industries are used at the local and urban levels. Research conducted by Landry (2005), O'Connor (2005), and Porter (2005) are cases in point. Creative industries originally target the UK and the British Commonwealth of Nations because several cities of the UK had economic problems after the 1980s. The alternative to overcome the economic slump was creative industries. For example, Landry (2005) deals with the case of London. Focusing on how "the cultural activity can weave its way like a thread through endeavors of all kinds, adding value, meaning, local distinctiveness, and impact as it proceeds" (p. 239), Landry maintains several advantages that London can utilize. Such advantages are: engendering civic pride, attracting international companies, and providing content for the IT-driven economy.

O'Connor's work (2005) applies the concept of creative industries to a city that is not related to the British Commonwealth of Nations. His main point is to explain the historical and cultural background of St. Petersburg, Russia as well as to check the status of urban development by creative industries. Through using another city, O'Connor's work shows that creative industries can play a crucial role in developing local or urban levels of economies. Even though O'Connor's work focuses on providing the background information of St. Petersburg, such as cultural and political situations, it is similar to this research in that both O'Connor's works and this research deal with local cities (St. Petersburg and Chuncheon) that are not part of the British Commonwealth of Nations and both studies concentrate on local situations.

If Landry (2005) and O'Connor (2005) study creative industries through practical cases of London and St. Petersburg, Porter (2005) is important in that he provides the theoretical concept of cluster that can be applied to every city in the world. Through listing benefits such as increasing the productivity of firms, promoting new business formation by using labors, skills, technologies, and capitals, he implies that creative industries can take a primary role in developing cities and local regions.[3] In particular, this concept is important because it is applied to Chuncheon, a city that has tried to develop its local economy through cultural industries.

As reviewed above, some researchers focus on the difference between creative and cultural industries. But, when both concepts are applied to a practical case such as local development, they are generally used with the same meaning.

[3] Porter's theory on cluster is explained more in section of the cluster approach.

Meanwhile, there is research providing the direction of study on cultural industries. Research made by Hesmondhalgh (2002), Bustamante (2004), and Steinert (2003) presents several areas as key points of cultural industries and emphasizes that these key points such as policies, ownership, and intellectual property rights are of importance to the study of cultural industries.

Hesmondhalgh (2002) provides a framework for examining cultural industries and suggests policies, ownership, and internationalization of cultural industries as key points of research. Likewise, Bustamante (2004) lists intellectual property rights, strategies of transnational multi-media groups, and the development of communication and cultural policies as the detailed areas to investigate. Steinert (2003), however, is different from other researchers in that he elucidates the research skills needed for studying cultural industries.

Introduction of Modern Strategies in Korean Cultural Industries

Thanks to the researchers mentioned above who have provided practical key points about cultural industries, countries like Korea have applied business strategies to cultural industries in order to create visible effects.

From the mid 1990s, Korea realized the necessity of an alternative driving force to lead the Korean economy and decided to develop cultural industries. In order to develop cultural industries with well-organized plans, two new strategies were introduced in the area of cultural industries. They comprise (1) the One Source Multi Use (OSMU) strategy and (2) the cluster strategy. Introducing these two strategies means that Korea emphasizes the commercial side of cultural industries. The OSMU strategy is supposed to maximize financial profits as well as promote a joint development of every area in

cultural industries such as animation, music, characters, and so on. In the case of the cluster strategy, it is introduced for the purpose of developing local economies with balance and efficiency. If creative industries are the frame applied to the UK, both the OSMU and cluster can be said to be the practical strategies applied to Korea.

The One Source Multi Use (OSMU) Strategy

One Source Multi Use is the integrated marketing strategy that utilizes one source in several ways. This method, introduced in Korea in the late 1990s, is explained in detail by Kim, H. S. (1998). He emphasizes the content of media industry in terms of suggesting the multi-window distribution system that means one source can be distributed through diverse gates (see Figure 1). Kim maintains that through this system the content industry can become a leading industry (p. 16). This system, while similar to the window effect, has a difference in that the multi-window distribution system includes other areas of cultural industries such as theme park, characters, and publishing while the window effect is limited to the usage of different media such as broadcasting, video, cable, and theater release. In addition, Kim points out that the character industry is the most promising area that can develop together with the animation industry (p. 49).

After Kim's multi-window distribution system, the One Source Multi Use strategy is mentioned as the strategy to develop cultural industries at several research sites. For example, *Content Korea Vision 21*, made by the Ministry of Culture & Tourism, stresses the necessity to use a cultural source with diverse genres, an approach that is totally different from those applied in the past that utilized one source for only one genre (2001, p. 7). Research undertaken by Kim, M. S. (2004), Shin (2001) and Won and Lee (2004) pay attention to plans adapting the OSMU strategy to marketing and exporting

plans. Shin (2001) stresses that the OSMU strategy can result in the effect of synergy and can lead to an increase the value-added while decreasing additional production costs. Shin, however, emphasizes the capital inflow from big companies and the strong support of the national government as preconditions, suggesting that the domestic animation industry is not mature enough to take advantage of this strategy yet.

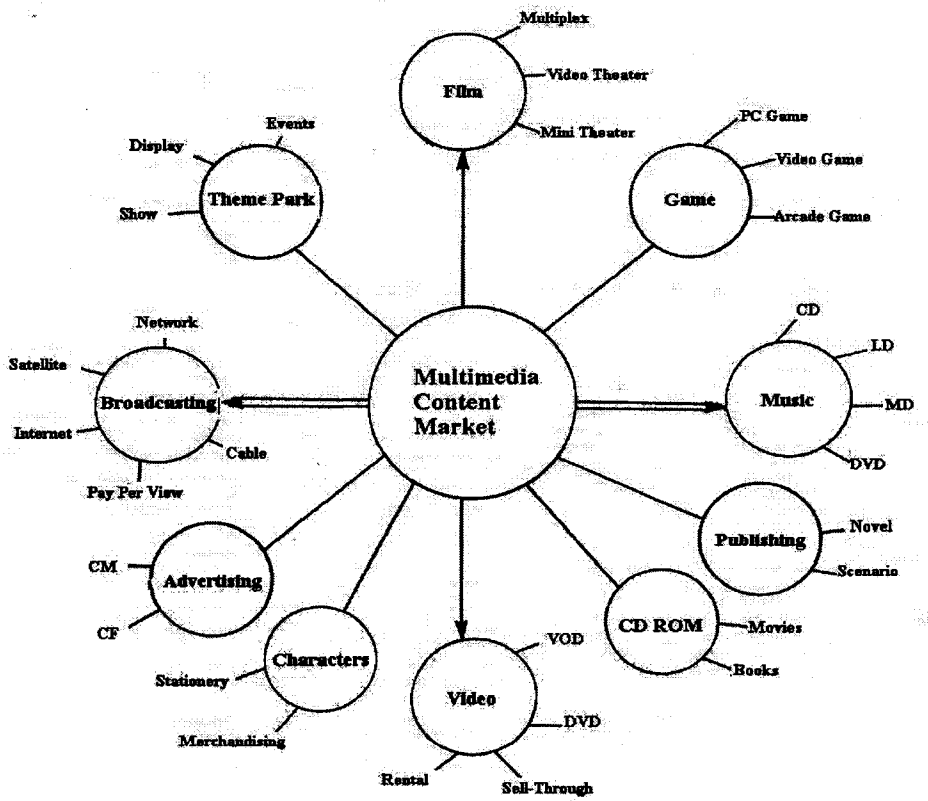

Figure 1. One Source Multi Use concept.
Note. From *Youngsan bininiseu segye* [Media software business] (p. 16), by H. S. Kim, 1998, Seoul: Moonjisa.

Furthermore, Won and Lee (2004) focus on export plans of cultural products. They maintain that three industrial areas—game, animation and character—have a closer relationship with one another than with any other industries. This intrinsic relationship stems from the fact that newly created content of one area can be easily applied to the

other area. So, the OSMU strategy should be considered for these areas altogether when cultural products of such areas are exported to the global market. The other important point of their work is that they attach great importance to exportation, suggesting that they also value the global market more than the domestic market in fostering cultural industries.

While previous research focuses on the adaptation of the OSMU strategy to the industry and the market, Han, C. W. (2004) connects this strategy to policy through presenting problems connected with introducing this strategy to Korean cultural industries. His perspective also stems from a position that the domestic market is too immature to fully utilize benefits of the OSMU strategy. Thus, he suggests the global market as the main target and mentions international co-production or co-investment as the first practical step to take. He adds that supporting this practical step by the government is crucial and underscores the importance of governmental support through his reference to the Star Project Support of KOCCA as a case in point.

The Cluster Approach

Whereas the OSMU strategy aims at maximizing the effect of one cultural source, the cluster strategy target is on raising local cultural industries. It is introduced as a way to improve economies at several levels such as at the city or local level. This approach is developed by Porter (1990) as a theoretical framework. According to him, clusters are the geographic concentration of related companies, institutions and organizations in a specific area (1998, p. 78). Clusters mean places to create synergy effects through collecting companies, universities, and research institutes, networking them, and sharing information, technology, and manpower. The key point to managing a cluster

successfully is dependent on sharing information and developing advanced technologies (Lee, B. M., 2003, p. 54).

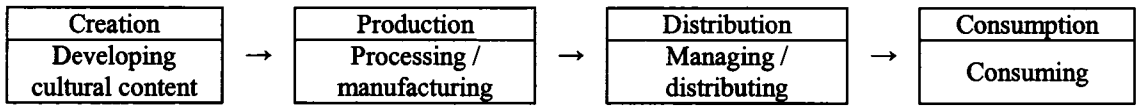

Figure 2. The value chain of cultural industries on the basis of the cluster strategy. *Note.* From *Jiyuk munhwa contents saneob hwalseonghwawa jeongchaek kwaje* [The activation of the local cultural content industry and the policy assignments] (p. 26), by KOCCA, 2003, Seoul: KOCCA.

There are some important points regarding clusters. The first key point is that clusters compose the value chain (Porter, 1998, p. 80). Figure 2 is the value chain of cultural industries on the basis of the cluster approach. Because this vertical relation from creation to consumption creates the value-added, it is called the value chain.

The second key point is that both cooperation and competition coexist in clusters. This value chain structure is established in a specific area and the close cooperation of the total steps can improve outcome and mutual trust. At the same time, companies and organizations at each step need to compete with each other in order to take a leading position and to produce a better outcome (Porter, 1998, pp. 79-80).

The reason why the cluster approach is important in fostering the local economy is that clusters suggest new roles for a government at different levels such as at the state or local level. That is, clusters play such a critical role in increasing exports, attracting foreign investment, and leading local governments to focus on exports and foreign investment (Porter, 2005, p. 260).

Because of these characteristics, OECD pays attention to the cluster approach and considers it as the reduced-scale national innovation system (NIS). On the basis of this

concept, several research projects, including case studies of several countries, were published. *Focus group on industrial clusters* (1998), *Boosting innovation: The cluster approach* (1999), and *Innovative clusters* (2001) are cases in point. These works mainly deal with European countries as well as with the information and communication technology industry.

Korea introduces this cluster approach to the information and communication industry, but has also applied this strategy to cultural industries. Park, Ku, and Shin (2001) is one of the research works that applies the cluster approach to cultural industries. Based on Porter's theory, Park, Ku, and Shin investigate the possibility of cultural industries in each local city by providing empirical data. They believe that the authority of nation-states is waning and in its place the importance of cities is growing; moreover, they emphasize the role of cultural industries in developing economies of cities because the competition of cities are intense and business management strategies are applied to city management (Park et al., 2001, p. 45).

One study undertaken by KOCCA is also important in that it deals with several cases of foreign cities (2003b). Similar to what Park et al. (2001) focus on, KOCCA's research analyzes the local base of cultural industries by cities but adds cases of foreign cities and presents the category by the lead type. As in Table 1, there are four types of clusters and most of them deal with the information and communication technology industry as the main industry except for the case of Sheffield. But, they recognize the importance of cultural industries and operate some projects that converge cultural content with the information and communication technologies. Telecom-Information-Media-Entertainment (T.I.M.E.) and Time Machine Project are cases in point.

Table 1. Cluster Management Type

Type	Cases	Major industry	Key concept or project	Key point
Led by local government	Sheffield (UK)	Creative Industries	-Revitalization -Cultural Industries Quarter (CIQ)	-Local development -City restructuring -Lead the participation of civilians
Led by education & research institutes	Liverpool (UK)	Information and Communication Technology Industry	-LAND (Location Activated Nomadic Discover) Project	-International exchange by research projects
Led by major companies	Kista (Sweden)	Information and Communication Technology Industry	-T.I.M.E. (IT+media entertainment)	-Managing information knowledge exchange system
Led by nation-states	Oulu (Finland)	Information and Communication Technology Industry	-Time Machine Project	-Public interests of social welfare and participation of citizens

Note. From *Jiyuk munhwa contents saneob hwalseonghwawa jeongchaek kwaje* [The activation of the local cultural content industry and the policy assignments] (p. 130), by KOCCA, 2003, Seoul: KOCCA.

In particular, it is necessary to pay attention to the Sheffield case. Sheffield, located in the UK, uses the cultural cluster strategy in order to develop its economy, rebuild the city, and attract the participation of civilians. There are two reasons to pay attention to the Sheffield case. First of all, it is a case that applies the concept of creative industries. Other types of clusters choose information and communication technology as the main industry. By contrast, Sheffield selects creative industries, an approach that is similar to the case of Chuncheon in which the animation industry was selected as one of the cultural industries. Second, Sheffield is a cultural cluster that is led and managed by the local government. Sheffield was originally known for its steel industry, but the depression of the steel industry after World War II, led to the closure of steel mills and to the mass unemployment of the 1980s (Montgomery, 2004). Therefore, the government of

Sheffield designed the strategy to develop cultural industries for the purpose of raising the local economy. Based on Porter's concept of industry clusters, Sheffield adopted the project of Cultural Industries Quarter (CIQ) and redeveloped the city. One needs to call attention to the fact that this movement was undertaken by the local government because Sheffield can be compared to Chuncheon that also focuses on one cultural industry by the lead of the local government.

The concept of cultural industries was created by Adorno and Horkheimer in the name of culture industry. Its meaning was changed from criticizing the capitalist system to boosting the economy after UNESCO provided its own concept. UNESCO's definition has influenced the meaning of cultural industries used most commonly now. Research on cultural industries undertaken by several scholars has been influenced and developed from this point. Moreover, this current research study is also based on this concept. One should note that this research focuses on two practical frameworks—the OSMU strategy and the cluster strategy—both of which were introduced in Korea for the purpose of developing effective cultural industries. There are two reasons to mention these strategies in this research: one is to examine the industrial characteristics of digitalized animation and the other is to analyze the local digital animation industry.

In summary, there are two theoretical frameworks for this research: one is globalization and the other is cultural industries. Furthermore, two key points are drawn from the theory of globalization: (1) the role of nation-states and (2) regionalization. Industrial characteristics and support programs are analyzed on the basis of these two key points. In addition, because digital animation is examined from the industry perspective, this research is based on the concept of cultural industries. In particular, two practical

strategies—the One Source Multi Use strategy and the cluster strategy—are used as practical frameworks to analyze the digitalized animation industry as well as the policy.

CHAPTER 3

RESEARCH QUESTIONS AND METHODS

Chapter Introduction

Chapter 3 provides the methodology by which the current study examines Korean digitalized animation and includes research questions, specific methods and procedure. On the basis of previous research on animation and of theoretical frames of globalization and cultural industries, this research proposes six research questions and employs two research methods. Six research questions are categorized into two groups, and the document data analysis and in-depth interviews are selected as methods. Lastly, the research procedure connecting questions and methods is provided.

Research Questions and Assumptions

Research Questions

This research targets Korean digitalized animation and focuses on the production area of digital animation. In order to examine whether Korean digital animation is being globalized on the basis of two key areas—political and economic areas—research questions are divided into two groups. Research Question Group (RQG) 1 relates to the economic area while RQG 2 connects to the political area.

The first question group is designed to determine the current status of the digital animation industry in order to examine the economic dimension of globalization and cultural industries.

1-a. What are the societal features causing the advent of Korean digital animation?

1-b. How has Korean digital animation developed?

1-c. What are the main features of Korean digital animation?

The second question group examines policies supporting the digital animation industry. These research questions attempt to analyze how government policy is connected to the digital animation industry. They are supposed to examine the political dimension of globalization.

2-a. Which government agencies are responsible for the policy implementation of digital animation?

2-b. What are the key policy principles for digital animation?

2-c. How are support programs for the digital animation industry operated?

The results of 1-a are discussed in Chapter 4, while the results of 1-b and 1-c are included in Chapter 5. Chapter 6 covers the results of 2-a, 2-b, and 2-c.

Problem Statements

In order to determine whether digital animation as a cultural industry shows characteristics of globalization, the following propositions are designed, and, in turn, these propositions are connected to research question groups.

Proposition A is related to the research question group 1 while proposition B is related to the research question group 2.

A. Digital animation shows significant characteristics and regionalization.

B. Policy and supporting systems for digital animation are carried out by both national and local governments.

Assumptions

On the basis of the problem statements mentioned above, the main assumption is that the digital animation industry from the late 1990s has become an important part of the Korean animation industry and furthermore shows characteristics of globalization.

Detailed assumptions of the research questions are as follows. On the basis of proposition A, the assumption of the first research question group, regarding the industrial development process, is divided into two points: one is that digitalized animation shows new characteristics that are not witnessed in cel animation and the other is that digitalized animation is establishing regionalization.

On the basis of proposition B, the assumption for the second research question group that focuses on government policy and supporting systems has two components: one is that both the national and local governments provide diverse digital animation support programs and the other is that the local government plays a crucial role in establishing regionalization.

Research Scope

The entire process of creating and releasing animation can be generally divided into two parts: one is the production process and the other is the distribution process. In terms of these two processes, the main scope of this research lies with the production process that can be categorized on the basis of the dimensional framework of globalization (see Table 2).

In the production process, the political globalization area purports to examine government support programs for animation production, while the economic globalization area focuses on analyzing industrial characteristics of the production

process. In addition, cultural globalization deals mostly with content of digital animation and with the adaptation of the content of digital animation to a locality in the production process. More specifically, the political area looks at the digital animation industry from the perspective of nation-states' role and examines production support programs provided by the government, while the economic area studies the industry from the perspective of regionalization. The political and economic areas comprise the main focus of this research.

Table 2. The Research Scope

	Political globalization	Economic globalization	Cultural globalization
Production process	Support system for the production process	Industrial characteristics	Content
Distribution process	Support system for the distribution process	Market characteristics	Audience reactions and responses

The cultural globalization perspective is not a focus of this research for two reasons. Firstly, as seen in Table 2, the main target of examination for this area in the production process is content. That is, for issues of cultural globalization, the main point is whether production companies take into account content in order to reflect audience propensities during producing digital animation. This concern thus is different from that of both the political and economic globalization areas which focus on the production process itself. Secondly, the theoretical foundation of the cultural globalization area is not directly related to either political or economic globalization whereas both political and economic globalization are connected to each other. As reviewed in Chapter 2, the development of technology and the spread of the Internet play a critical role in increasing capital flow and intensifying multinational corporations. Therefore, the role and status of

nation-states are changed, and the establishment of regionalization can be operated at diverse levels. In other words, the dimensional characteristics of political globalization and economic globalization are mutually interconnected. Therefore, it is necessary to deal with cultural globalization areas separately.

In the case of the distribution process, political globalization mainly focuses on support programs for the distribution process while economic globalization examines market characteristics. In contrast, cultural globalization deals with audience reactions and responses. The distribution process is not included in this research for two reasons. First, one of the main objectives in this research is to assess whether digital animation works for establishing a fully developed production process in Korea. Second, the distribution process can be dealt with not by production companies, but rather distribution companies. Therefore, the distribution process should be studied separately.

Research Methods

This research aims at examining Korean digital animation, focusing on industry status as well as supporting systems. Therefore, this research mainly purports to observe and understand the Korean digitalized animation industry, thus suggesting that this type of research is qualitative in nature. Patton (2002) explains that qualitative research "produces findings derived from real-world settings where the phenomenon of interest unfold naturally" (p. 39). Hoepfl (1997) defines qualitative research as seeking "illumination, understanding, and extrapolation to similar situations." In order to achieve the aim as qualitative research, this research selects two methods: document data analysis and in-depth interviews.

Document Data Analysis

To best understand the development of digital animation industry, it is useful to conduct a historical analysis. Materials for this research primarily are concerned with digital animation-related issues in Korea and are of importance in order to reach appropriate conclusions. Accordingly, one of the research methods is document data analysis.

In the process of documenting data analysis, there must be as much data as possible, the type of data must be as diverse as possible, and the accuracy of data should be as exact as possible. It should be certain about who made and provided the data, and when the data were made and provided as well as how they were collected and what was the target period for this research. These preconditions secure objectivity which is of primary importance in qualitative research.

Documented data analysis, called documentary research by May (2001), is a useful method because documents "...have the potential to inform and structure the decisions which people make on a daily and longer-term basis, constitute particular readings of social events, and tell about the aspirations and intentions of the periods to which they refer and describe places and social relationships at a time when we may not have been born, or were simply not present" (p. 176). In addition, he explains, "...documents are recognized as media through which social power is expressed" (p. 183). He proposes that this method will be more widely used and will yield more valuable insights for social research (p. 198).

Scott (1990) presents the range of documents for research, defining a document as generally a written text (p. 12). He also accepts magnetic and electronic means that store

and display true documents. McCulloch (2004) also refers to electronic documents as available materials, for these electronic documents have rendered great service in regard to the transformation of the nature of documentary studies (p. 2). May (2001), in addition to these documents, accepts historical documents and reports that rely on official statistics as useful sources.

Meanwhile, there are some requisites for this method that should be kept in mind. Scott (1990) pays attention to four criteria that are crucial in assessing document quality. These criteria are authenticity, credibility, representativeness, and meaning (pp. 6-8). In addition, May (2001) points out the relevance, scope and relations between events for making this method reliable.

Subjects

According to Scott (1990), there are four types of documents: closed, restricted, open-archival and open-published (p. 14). All documents for this research belong to either open-archival or open-published types. The kinds of documents for this research are newspaper articles, research reports made by reliable research organizations, two types of periodicals (i.e., magazines and academic journals) as well as academic dissertations and books.

Subjects of document data are divided into two categories by the search type. One is individual search including data that are searched using search engine services provided by data providers. Data, however, that are not searched by search engine services are also considered in this group because they cannot be searched by public search engine services. The other includes data that can be collected from public search engine services. The number of articles is a matter of consideration for this research.

Individual search (newspapers, research reports, and periodicals).

Individual search includes newspaper articles, research analyses and reports as well as periodicals. The first two forms of data are collected by the data sources' own search engine services since newspapers and research organizations have their own search engine services. But, in the case of periodicals, it is impossible to review the total amount of data on the Web because they are paid services. Therefore, one needs to review these printed materials manually.

The first data are newspaper articles. Newspaper articles are accurate in providing basic information on production staff, storylines, business strategies and plans and so on. In addition, as the value of animation becomes obvious as a cultural product, newspaper articles employ more coverage of animation, post their own analysis reports, and conduct interviews with many people involved in animation-related areas.

Newspaper articles can work as a useful source to cover what in-depth interviews cannot. Whereas in-depth interviews can provide detailed information from the experiences of respondents, newspaper articles can suggest comprehensive information from diverse cases. That is, information from in-depth interviews is detailed but on a small-scale while information from newspaper articles is superficial but extensive. For this reason, newspaper articles are used for ensuring comprehensive information about digital animation and for handling opinions of both producers and policy-managers. In addition, for the purpose of checking the recent movement in the digital animation industry, analysis report articles, which are written by the reporters themselves and which are usually published as a series, are carefully reviewed.

Currently, in Korea, there are ten nationwide newspapers and two information technology and industry newspapers. All of these newspapers manage their own Internet versions and operate their own article search engine services, all of which let site visitors look up newspaper articles for free quickly and easily. Yet some of them such as *Joongangilbo*, *Hankyorehshinmun*, *Kyunghyangshinmun*, *Munhwailbo*, and *Digital Times* have limitations to the use of their search engine services. For example, their search engine services are restricted to one year or two years. Due to this reason, those five newspapers are not included in the number of articles (Table 3).

Table 3. Number of Articles in Seven Korean Daily Newspapers

	Animation	Digital animation	Cultural industries	Digital content
1999	1,595	278	2,190	390
2000	3,039	604	2,480	1,786
2001	3,192	874	3,049	2,385
2002	3,337	730	3,466	2,084
2003	3,175	600	3,082	2,108
2004	2,636	443	3,108	2,172

Note. Seven daily newspapers are *Chosunilbo*, *Dongailbo*, *Kukminilbo*, *Segyeilbo*, *Hankookilbo*, *Seoulshinmun*, and *Electronic Times*.

Nonetheless, articles from newspapers excluded from Table 3 are also considered if they are related to or mentioned in newspapers counted in Table 3. This selection process is related to the concept of "snowball sampling." This concept originally purports to be used for collecting interviewees. Thus the notion that the researcher finds more people through referrals from other respondents is applied to the collection of newspapers.

The second data are comprised of research reports put out by the government and research institutes. In total, there are two types of organizations. One includes ministries of government administration [e.g., the Ministry of Culture & Tourism (MCT) and the

Ministry of Information & Communication (MIC)]. The other encompasses research institutes mostly funded by the national government. The Korean Broadcasting Institute (KBI), the Korean Culture & Content Agency (KOCCA), the Korean Film Commission (KOFIC), the Korea IT Promotion Agency (KIPA), and the Korea Culture & Tourism Policy Institute (KCTPI) are cases in point. Research papers or in-depth analysis reports published by these authorities are concentrated principally in practical fields, such as the industry and market area or the policy area. Hence, it is important to collect and analyze materials published by these organizations. The number of research reports reviewed for this research is in Table 4. This category also utilizes the concept of "snowball sampling."

Table 4. Number of Research Reports by Five Korean Research Institutes

	Animation	Cultural industries or digital content
1999	0	2
2000	0	4
2001	3	6
2002	3	8
2003	2	39
2004	6	25

The third data source is periodicals (or magazines). Because periodicals require a paid subscription and access to their Websites is mostly limited, searching for periodical articles is carried out manually at the public library, such as the National Assembly Library which is free. Mainly two periodicals are reviewed. One is intended to target animation and the other the digital content, information and communication technology industry as well as cultural industries.

In the case of animation periodicals, *Animatoon* is selected for this research. There are two reasons for choosing this magazine. First of all, *Animatoon* started its business around the time when digital animation came onto the world stage and when Korea increased its interest in digital animation from that moment of the mid 1990s. This periodical is still in business, while other animation periodicals have already folded.

The second reason is related to the nature of periodical articles. There are several animation periodicals in Korea as of 2004, but the focus of most magazines is entertainment and highlights exclusively Japanese animation. Their consumer target is mainly the teenage market, and they provide simple and short essay style articles introducing Japanese animation. *Animatoon*, however, is different from these periodicals. For example, Nelson Shin, the editor-in-chief of *Animatoon*, has extensive animation production experience and offers not only articles explaining the practical areas of making animation but also introduces in-depth articles about the animation industry itself.

In the case of content-related periodicals, *Digital Content* is chosen. The reason to select this periodical is similar to that of *Animatoon*. This magazine has been publishing for more than ten years. At an early stage, it solely focused on technologies and hardware of information and communication technologies. But, with the emphasis of software and the advent of cultural content before and after 2000, it currently deals with cultural content that is combined with information technologies. That is, for a long time, this magazine has dealt with not only information technologies but also cultural content.

Public search engine services (dissertations, journals and books).

Data that are collected by public search engine services are comprised of academic materials. That is, dissertations, academic journal articles, and books are included in this category. The public search engine service is the web search service that checks its own catalogue. Two services provided by public libraries are used for this research. One is provided by the National Assembly Library and the other is served by the National Library of Korea. Both services possess and manage the largest amount of data in Korea. In addition, they provide search engine services catalogued by the kind of materials, such as book, academic journal, government publications, etc. For this reason, two public search engine services are used for collecting data.

Table 5. Number of Master's Theses and Doctoral Dissertations Related to Animation and Cultural Industries, Published in Korean Universities

	Animation	Digital animation	Cultural industries	Digital content
1999	84	5	28	1
2000	112	4	38	5
2001	117	3	49	19
2002	176	15	66	27
2003	254	16	84	38
2004	185	14	65	34

Dissertations that choose animation as a research topic were initiated no more than a decade ago, a surprisingly short period when compared with the Korean animation history of almost a half century. Just about ten years ago, academic research on animation increased in both quantity as well as quality. Through reviewing and analyzing dissertations, the current study closely examines opinions from the academic arena on animation. The number of dissertations uncovered in this area is in Table 5. Note that this category also utilizes the concept of "snowball sampling."

Lastly, data subjects which also require analysis are articles published in academic journals and books. Independently published books are written by people of diverse circumstances such as a producer of a broadcasting station, an animation columnist, a graduate student majoring in history, etc. For this reason, topics are also becoming diversified.

Second, articles published in periodicals as well as books are reviewed. While periodicals such as *Animatoon* and *Digital Content* are known as magazines, periodicals of this category are recognized as peer reviewed academic journals. This category does not limit the number of journals to be searched. Search engine services with key words that will be discussed later are used (see Table 6 and 7). This category also applies the concept of "snowball sampling."

Table 6. Number of Academic Journal Articles Published in Korea on Animation and Cultural Industries

	Animation	Digital animation	Cultural industries	Digital content
1999	59	2	118	1
2000	50	6	72	2
2001	72	4	94	8
2002	80	6	103	14
2003	75	5	116	17
2004	93	6	139	10

Table 7. Number of Books Published in Korea on Animation and Cultural Industries

	Animation	Digital animation	Cultural industries	Digital content
1999	31	1	73	1
2000	33	1	75	5
2001	42	4	92	12
2002	40	3	75	12
2003	32	1	97	10
2004	29	2	64	4

Plan

Keywords.

To collect data from the document sources mentioned in the previous section, several keywords are used, such as 'animation,' 'digital animation,' 'cultural industries,' and 'digital content.' Keywords are categorized in two groups: one is for animation itself and the other for the industrial environment.

The first keyword group has two words, 'animation,' and 'digital animation.' 'Animation' is used to refer to the entire environment of the animation industry, including digital animation, while 'digital animation' is used to access exact information on this topic.

The second keyword group that contains 'cultural industries' and 'digital content' explores the area of cultural industries because digital animation is usually recognized as such.

Time period.

On the whole, the subject period of the respective data sources used for this research is the same. The reason for starting with 1999 is that it is recognized as the year when the first full digital Korean animation was produced and released. There is no official record about what was actually the first Korean digital animation. There were several animations produced digitally before 1999, but *Steelforce*, produced in 1999, is generally acknowledged as the first complete 3D animation.

In the case of newspapers, articles from 1999 to 2004 are reviewed. But, there are some limits to the data collection. Only the year of 2004 is available in *Joongangilbo*. Similarly, *Hangyorehshinmun* provides only two years of publication, 2003 and 2004,

while *Kyunghyangshinmun* is available only from June, 2003. In the case of *Digital Times*, searching the year of 1999 is not possible. Consequentially, data that are reviewed for this research have several missing years for some newspapers.

Research reports that were published by research institutes and organizations appearing during the same time period, that is, from 1999 to 2004, are chosen. Nonetheless, there are certain organizations that were established after the year 1999, such as KOCCA. Their publications started after 2002. In this case, all research publications after 2002 are reviewed and analyzed. Therefore, the time period for research reports of institutions differs somewhat from one another.

Third, the subject period of periodicals for this research is similar to that of newspaper articles: that is, the time period from 1999 to 2004. Periodicals, such as *Animatoon* and *Digital Content*, have a slight difference in reference to the quantity of articles. *Animatoon* is published bimonthly while *Digital Content* monthly. So, the number of articles is significantly smaller than that of newspapers. But, the number of pages is generally more than newspaper articles, so the range of articles is wider and deeper for periodicals. Hence, searching, reviewing, and analyzing both newspapers and periodicals complement one another.

In general, academic degree dissertations range from M.A. (Master of Arts) to Ph.D. (Doctor of Philosophy). This research does not take into account the field of dissertations such as education, geography, and so on. Academic dissertations also cover the same time period, which range from 1999 until 2004.

Articles of academic journals and independently published books also cover the same time period between 1999 and 2004. Similar to the case of dissertations, the kinds of journals are not the concern of this research.

Data analysis.

The data collection of newspaper articles began in the year 2003 and hence was conducted once every month until December of 2004.[4] As a result of using search engine services, articles that include keywords of 'animation,' 'digital animation,' 'cultural industries,' and 'digital content' in the title or in the text were identified. Articles that dealt with digital animation that was already released and broadcast as well as mentioned the agencies 'MCT,' 'KOCCA,' or 'GIMC' were analyzed more closely.

Starting in 2003, research reports that had been published from 1999 were collected and reviewed piece by piece. Reports that were available to download from the websites were reviewed until July of 2005. In the case of other reports that were not available on the web, the list of reports was made in advance. Then, these reports were collected and reviewed at the National Assembly Library and at the Library of KOCCA from August through October of 2005.

In the case of *Animatoon*, all issues of *Animatoon* had been collected by Dr. John A. Lent of Temple University. Issues from 1999 until 2003 were borrowed from him and carefully read. In addition, issues of 2004 were carefully read at the National Library of

[4] When the data collection began in 2003, only seven daily newspapers—*Chosunilbo, Dongailbo, Kukminilbo, Segyeilbo, Hankookilbo, Seoulshinmun, and Electronic Times*—were searched. They were randomly chosen and other five newspapers were searched from January of 2005. Because of this random selection, searching other five newspapers—*Joongangilbo, Hankyorehshinmun, Kyunghyangshinmun, Munhwailbo, and Digital Times*—could not cover the entire time period (1999-2004) that was designated for this research.

Korea in September of 2005. Similar to *Animatoon*, all printed issues of *Digital Content* were carefully read at the National Assembly Library in September of 2005.

Academic dissertations, academic journals and scholarly published books were searched every year beginning in 2003. Searching these data was carried out by the public search engine service provided by the National Assembly Library and the National Library of Korea. In the case of academic dissertations, dissertations that were available to open and download from the website of the National Assembly Library were collected and carefully reviewed during the year 2003. Other dissertations that were available only as printed version were collected and reviewed at the National Assembly Library from September through November, 2005. Dissertations dealing with unrelated topics such as technical solutions and the use of digital technique for educating children were excluded before reviewing.

Academic journals were searched two times. The first search was in December, 2003 and the second search was conducted in September, 2005. The list was made from these two collections and journal articles were carefully reviewed at the National Assembly Library in September and October, 2005.

In the case of independently published books, it is similar to the process undertaken with academic journals in that searching and collecting books was conducted in order to make a list. The difference in data collection, however, lies with the review process. The content of each book was reviewed first. Then, tables and figures that were included in each book were reviewed. Books that were judged as having relevant data regarding these two steps were carefully analyzed one by one during the period of January through December of 2005.

In-Depth Interviews

The second method of research is to conduct in-depth interviews, also referred to as nondirective, unstructured, non-standardized, or open-ended interviews (Taylor and Bogdan, 1984, p. 77). According to Taylor and Bogdan (1984), there are three reasons for conducting in-depth interviews: one is to know about a life history or sociological autobiography, the next to learn events and activities that are not observed, and the third to map a set of situations or people (pp. 78-79).

This research method is less systematically structured when compared to quantitative research methods (Babbie, 2001, p. 291), but nonetheless is evaluated as one of the most powerful tools in qualitative research (Goodman, 2001, p. 309). Wimmer and Dominick (1997) state this is such a powerful tool because of the amount of detailed information it generates (p.100) while Weiss (1994) refers to the detail in information as the first reason to conduct in-depth interviews (p. 9).

Unlike surveys, the interview method does not call for highly organized questionnaires or strictly specified words in a set of questions. Instead, it is sufficient to make a general plan about the interview procedure before conducting interviews (Babbie, 2001, p. 291) or to start interviews with descriptive questions (Goodman, 2001, p. 314). Meanwhile, Rubin and Rubin (1995) suggest transparency, consistency-coherence, and communicability to make interviews credible (p. 85).

Based on these characteristics, this researcher can discover information not revealed through officially published materials.

Practically, in-depth interviews need not be concerned with the concept of validity that is such a crucial factor in inferential research because the purpose of in-depth

interviews is to "illuminate experience or generate hypotheses" (Goodman, 2001, p. 315). Instead, scholars suggest focusing on something different. For example, Weiss (1994) suggests focusing on the quality of interviews (p. 150) while Babbie (2001) talks about whether the researcher is in attendance at interviews (p. 298).

Golafshani (2003) connects the concept of reliability to good quality research through quoting Eisner (1991) and Stenbacka (2001). Good quality research purports to understand a situation that might be confusing and to explain a purpose of research. In addition, Golafshani (2003) suggests notions of dependability discussed by Lincoln and Guba (1985) as well as of trustworthiness explored by Seale (1999) as concepts that can be matched to the concept of reliability in quantitative research.

Therefore, it can be said that enhancing dependability or trustworthiness along with the quality of interviews are important for reliability and validity in qualitative research. Based on these points, this research considers two points: one is the analysis of the content of interview transcripts and the other is the interview procedure.

All recorded data are categorized along key dimensions based on the OSMU strategy, co-production, and support programs because they are mentioned during interviews and key points of this research. Moreover, this process is confirmed by an additional person who is currently a Ph.D. student of mass communication in Korea because all interviews were recorded in Korean. In the case of the interview procedure, the researcher, as Babbie (2001, p. 298) says, attended all interviews. In addition, similar types of questions were given to all respondents. For example, in the case of respondents who work in the practical areas, the OSMU strategies, the strategy to advance into

foreign markets as well as the strong and weak aspects of digital animation are mentioned in the interviews.

Subjects and Plan

The important factor of in-depth interviews is the careful sampling of respondents. Respondents must be people who can provide valuable information. Given these criteria, this research targets the professional positions of respondents when they are picked for interviews. People who have worked in positions of authority and impact are chosen for this research.

In selecting respondents in industry, this research examined producers who already had experienced the entire production process of digital animation. In addition, this research sought producers or CEOs who produced digital animation with the cooperation of other countries. Moreover, this study sought producers who experienced the entire process of both cel and digital animation.

On the basis of these criteria, four interviewees were selected. Three respondents are directors and CEOs and one person is a CEO. Three of them already released their animation works either at theaters or through broadcasting. Because of their release experiences, their animation works are well known to consumers. One person works in the production process. Except for this one person who is in the production process, the other three people are either producing or planning their next project. Because of their experience in making digital animation, they are qualified to be interview respondents. Yet, one person who was expected to have experience in the production process of both cel animation and digital animation did not respond to the interview request.

In selecting respondents in the policy-related areas, this research focuses on selecting people who currently work at organizations of KOCCA and GIMC because both organizations are the subjects of this research. In particular, this research focuses on those who work at related areas such as policy execution and support programs planning.

On the basis of these criteria, this research selected six interviewees. All six people are currently working at organizations that are the focus of this research; moreover the organizations with which they are associated are funded by either the national or local government. In particular, one person (Sul, Gee-Hwan) has experience in working at both types of organizations. Therefore, their views enhance this research in significant ways.

In terms of the selection of respondents in the academic research areas, this study focused on those whose main area is animation. Yet, because there are not many academic researchers who focus solely on animation, this research also includes professors who have had experience in the animation production itself outside of academia.

On the basis of these criteria, two interviewees were selected. They are incumbent professors. Both professors work at animation-related departments. Importantly, they have experience in working at production companies as well and one professor (Lee, Jeong Min) is an expert in computer graphic animation. Because of their experiences and positions, they too qualify as subjects for this research.

Procedures.

The length of each interview is approximately one to two hours, usually recognized as enough time to obtain the necessary detailed information (Weiss, 1994,

p. 56). Interviews were recorded, since a tape recorder is more reliable to capture and store information than a researcher's memory or notes (Taylor and Bogdan, 1984, p. 102).

The interview location was designated as the offices of the respondents with their prior permission. But in the case of policy-managers whose offices are not available for interviews, a meeting room was used. No other people except for the interviewer and a respondent were present during the interviews.

Interviews were conducted one time for each respondent, but one respondent was interviewed twice. This respondent's first interview needed to stop because of the time limit. The second interview was conducted one week later.

Interview groups.

In this study, people who are the subjects of in-depth interviews are basically divided into three areas. The first group includes people who are involved in practical aspects, i.e., in the production field. The second group encompasses policy-managers and supporting system managers. Lastly, the third includes academic researchers whose work focuses solely on animation. In order to eliminate subjectivity that is associated with in-depth interviews and to heighten objectivity to ensure credible opinions, an extra number of people within each area were interviewed.

A total of 12 people were interviewed. Four of them came from the production area and six people in the policy-related area were interviewed. Half of them were working for the national government and the remaining three work for the local government. Two people are on service as professors at two different universities (see Appendix C).

Further contacts were made with eight additional people. Four of them were working as either directors or CEOs. Two of them were policy managers and the remaining were incumbent professors. Three of them refused to be interviewed and the remaining five did not respond to the interview request. One of the three people who denied the interview explained that he already had been interviewed extensively and did not want to reveal too much information about his digital animation before its release. The other said that he had resumed his animation production process and did not have enough time to be interviewed. Another explained that his animation was not a digital animation even though it was co-produced with North Korea. In the case of the other people who did not respond to an interview request, it is impossible to determine their reasons why not to be interviewed.

As mentioned earlier, selection of respondents utilized the concept of "snowball sampling," which means that the researcher finds more people through referrals from other respondents (Goodman, 2001, p. 315). Among the 12 respondents, three people were recommended by other respondents: one is a professor and the other two people work at policy organizations. There was another person who was also recommended by one of the respondents, but he did not respond to the request to be interviewed.

The first group includes people who participate in making digital animation, that is directors who control the production process and CEOs who take charge of the whole procedure including producing, financing, marketing, distributing, and so on. Analysis of this group makes it possible to understand the production environment of digital animation as well as the advantages and disadvantages that surface while making digital

animation. Inclusion of this group also enables this study to capture problems and experiences that producers encounter during the production process.

Most respondents concurrently work not only as Directors but as CEOs as well. They are as follows:

- Kim, Moon Saeng, Director and CEO of Tin House
- Choi, Jong-Il, CEO of Iconix
- Kwon, Jae Woong,[5] Director and CEO of Big Film
- Hong, Sung-Ho, Director and CEO of Independence

All interviews took at least one hour and were conducted and recorded at their separate offices.

Respondents in the second group are involved with policy management. Respondents are subdivided into two groups. The first includes respondents working at KOCCA. Interviews with them are designed to gather information about support systems of the national government. The second group covers respondents working at GIMC. They are as follows:

- Lee, Byung-Min, Director of Policy Development & Analysis at KOCCA
- Sul, Gee-Hwan, Executive Vice President of Training & Technology Development Division at KOCCA
- One employee at KOCCA[6]
- Kim, Jeong-Kyu, head of the Planning & Management Division at GIMC
- Yu, Il, head of the Animation Business Division at GIMC
- Ahn, Yu-sub, head of the Animation Division at GIMC

[5] He is a different person of the same name as the researcher.
[6] He requested anonymity.

Interviews with the above respondents were arranged in order to ascertain their experience and information about support systems of the local government. Both KOCCA and GIMC are organizations that operate practical support programs.

All interviews took at least one hour and were conducted primarily in the meeting room because the offices of these respondents were mostly accessible to other employees. The entire interview was recorded for each session.

The third interview group includes people from academia, especially those who specialize in animation. There is a special reason to conduct such interviews: to verify these respondents' general acknowledgment of animation and to confirm whether they have an interest in digital animation specifically.

This interview group contains two respondents and each person works at a different university. Both have conducted research and made official presentations about this field. They are as follows:

- Han, Chang-Wan,[7] Professor of the Department of Comics & Animation at Sejong University
- Lee, Jeong Min, Professor of the Department of Animation at the Korean National University of Arts

Two more professors were contacted. One, however, did not have time to be interviewed because he had resumed his animation work recently. He is the director of that animation project. The other did not respond.

[7] He also works as the Chairman of the Institute of Comics and Animation Studies and as CEO of Sejong Edutainment Co., Ltd.

All interviews took at least one hour and were done at their separate offices and were recorded. But, as mentioned above, one of the respondents, Lee, Jeong Min, was interviewed twice because of the time limit.

Key Points of Questionnaires

The primary purpose of conducting in-depth interviews is, more than anything else, to uncover information that is not revealed in extant documents. Hence, this process takes for granted that questionnaires should concentrate on discovering unknown facts as well as be differentiated by respondent.

The question and interview procedures are principally divided into two types: one is structured while the other is unstructured (Lombard, Lent, Greenwood, and Tunç, 1999, p. 25; Goodman, 2001, p. 312; Gunter, 2000, p. 26). While structured interviews generally create questionnaires and interview ordering, unstructured interviews do not use any pre-made interview schedules. Instead, unstructured interviews allow respondents to speak in their own words and to provide more information in their own way.

The interviews for this research are mixed with both structured and unstructured types. The key points of the questionnaires are pre-designed, and interviews proceed according to their protocols. But there are no fixed questions, with the interviewer allowing respondents to express their opinions in their own way. Goodman (2001) also states that most in-depth interviews are either of these two formats (p. 312).

Goals of interview questionnaires.

Interviews of the practical working areas group are connected to Research Question Group 1. The goals of questionnaires for this group are to examine the

production process as well as the production environment in detail, and to scrutinize whether regionalization, recognized as a characteristic of economic globalization, is clearly seen as part of the process of the production and business of Korean digital animation.

Interviews of policy-related areas group are connected to Research Question Group 2. The main goal intended with this group is to analyze the current situation about supporting systems. Through interviewing respondents of the national government, characteristics of the organization and the policy are achieved. Similarly, interviews with respondents of the local organization are to acquire information about details of the current programs and about the process of managing the current system.

Interviews of academic research areas group, contrary to the first two interview groups, are connected with both Research Question Group 1 and 2. The goal of interviews with this group is to check out the present industrial status, international environment about digital animation, and related topics.

Key points for each interview group.

Questionnaires for people in the production area basically focus on production experiences. The intention of these questionnaires is related to the first research question group: to explore the historical process, the present status, and the strengths and weakensses of the Korean digital animation industry.

Since most respondents hold both director and CEO positions simultaneously, questionnaires do not have any variations. The key points of questionnaires are as follows. First of all, the production process itself is mainly asked about. Since each company has its own animation work, experiences acquired from the production process are generally

asked of the respondents. The second point relates to the co-production system. Interviews cover the advantages and disadvantages that directors experience, problems of co-production systems, and the respondents' influence on the domestic production system. The third point is about marketing strategies with the OSMU strategy. Opinions about the OSMU itself and marketing strategies based on OSMU are examined.

These are key points of questionnaires, but, as mentioned already, interviews are not limited to collecting information only about these three points.

Questionnaires for the second interview group cover questions of Research Question Group 2. These questionnaires focus on examining the operation of support programs.

The first key point is about the current supporting systems as applied to questions given to respondents working for both the national and local governments. The second point of the questionnaires is concerned with the cooperation among various organizations. This point is also used for both the national and local government areas. The third point is about some strategies such as the OSMU strategy and the cluster strategy. Questions of this point are also given to respondents of both areas. The fourth point, which is available only for respondents of the local area, is about characteristics of the current situation of the local city, Chuncheon.

Questionnaires for the third interview group are connected to both Research Question Groups. Questionnaires are quite comprehensive. Questionnaires for the other two interview groups, of course, are comprehensive. Nonetheless, since the main reason for interviewing this group is to hear more macroscopic opinions about both the industry

and related policy, questionnaires are similar to what other respondents are asked. The interviewer, however, mainly focuses on acquiring their own opinions and evaluations.

First of all, opinions about current supporting systems are asked. Secondly, opinions about strategies of the OSMU and the cluster are gathered. The third question, which is different from other questions, is to solicit views about international trends as well as the environment for digital animation. With these key points covered in the questionnaires, opinions related to respondents' visions regarding directions that the Korean digital animation industry needs to maintain are acquired from respondents.

Research Procedure

Based on research questions and methods that are explained above, this research sets up two research procedures to follow. One is the Research Procedure A that shows the main flow of this research connecting research questions, theoretical frameworks and research methods (see Figure 3). To examine the Korean digitalized animation industry, research questions focus on the current status of digital animation industry and the policy managed by the government. Because this research looks at digital animation as a cultural product from the viewpoint of globalization, it adopts theories of globalization and cultural industries. As a method to draw results, the methods of document data analysis and in-depth interviews are used.

Meanwhile, the Research Procedure B shows the connection of research questions, propositions and assumptions (see Figure 4). Key points of research questions are materialized as two points: one is that digital animation clearly shows new industrial characteristics and regionalization while the other is that policy and supporting systems

have been proceeded by two administrative organizations, the national and local government. These two propositions are connected to four assumptions and each proposition includes two assumptions separately. The first two assumptions connected to Research Question Group 1 focus on the new characteristics of the digital animation industry that are not seen in cel animation industry and the regionalization of the digital animation industry network. The results for these two assumptions are provided through Chapter 4 and Chapter 5.

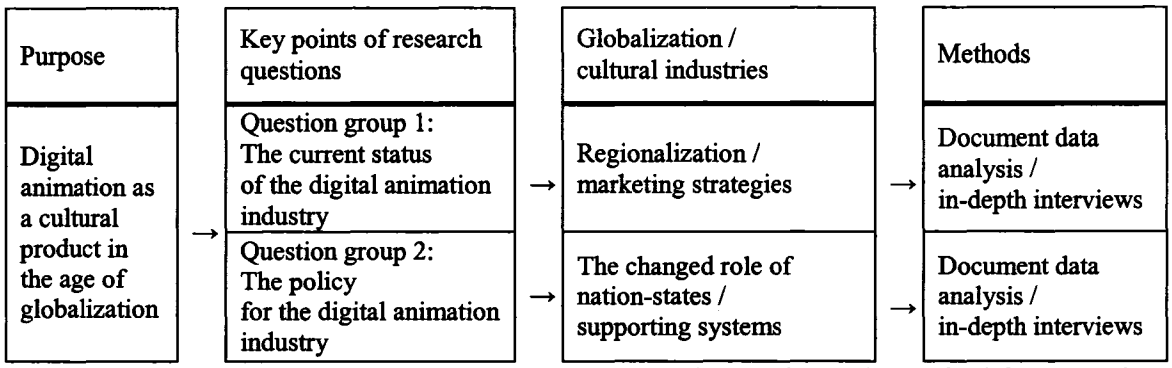

Figure 3. Research procedure A that connects research questions, theoretical frameworks, and research methods.

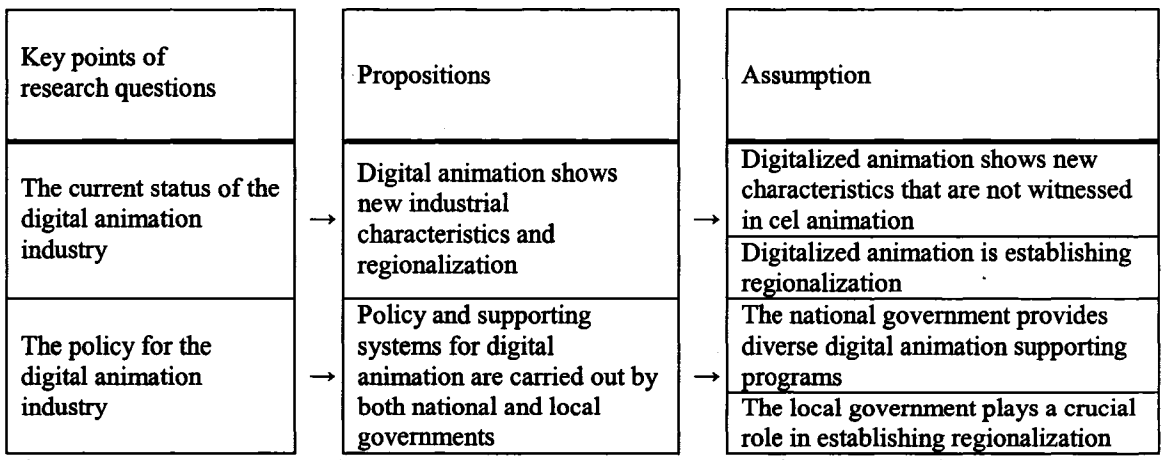

Figure 4. Research procedure B that connects research questions, propositions, and assumptions.

The second two assumptions, focusing on policy and supporting systems, are connected to Research Question Group 2. They involve providing evidence that both national and local governments provide diverse support programs and that the local government plays a crucial role in establishing its own network for digital animation. The results are presented in Chapter 6.

CHAPTER 4

INDUSTRIAL CONTEXT ENCOURAGING DIGITAL ANIMATION

Chapter Introduction

Chapter 4 presents societal reasons why digital animation is now at the forefront in Korea in the beginning of the 21st century. Three industrial areas are discussed: (1) animation industry, (2) cultural industries, and (3) information and communication technology industries. The current industrial status of these three areas is analyzed for the purpose of explaining why digital animation is being strongly developed in Korea.

The research question addressed throughout this chapter is as follows:

1-a. What are the societal features causing the advent of Korean digital animation?

Animation Industry

It is necessary to review the Korean animation industry on the basis of two points. One is that the amount of animation created by subcontracts is decreasing significantly. The other is an indirect factor and is divided into sub-areas: the first is the global success of the US digital animation from the mid 1990s and the second is the open policy in Korea regarding Japanese popular culture from the late 1990s.

The Subcontracts Reduction and the Perception on the Production System Problem

The first point affecting the advent of digital animation is the reduction in the amount of subcontracts. It is well-known that the Korean animation production system is generally controlled by subcontract orders. Yet it is wrong to insist that the subcontract-

based production system results in only negative effects. As in Table 8, Korea has maintained the strong growth until the early 2000s because of subcontract production.

Table 8. Growth of the Korean Animation Industry

	2000	2001	2002	2003
Market sales	$159,000,000	$213,000,000	$179,000,000	$224,000,000
Export	$126,000,000	$121,000,000	$83,000,000	$76,000,000
Companies	168	169	163	N/A

Note. From *Animation saneob baekseo* [The white paper on the animation industry], by KOCCA, 2004, Seoul: KOCCA. Copyright 2004 by KOCCA. *Animation saneob baekseo* [The white paper on the animation industry], by KOCCA, 2005, Seoul: KOCCA.

Shin (2002) says that the main reason why Korea was able to rise to the top as the country producing the most subcontract animation is that there was no competition from other countries (p. 84). Yu (1999) also mentions this and points out that labor costs in Korea were cheaper than in major animation production countries and that techniques were much more advanced compared with those of other labor-intensive countries in the past (p. 43). Because of this reason, as of 1997, Korea was responsible for about $220 million,[8] which is about 50% of the world subcontract production while China took 23%, Taiwan 9%, Philippines 7%, and 11% for the rest countries (Cho, Han, Han, Choi, and Kim, 1999, p. 19).

From the late 1990s, however, there were some signs of changes both in the world and in Korea. The devaluation of Korean currency that occurred as a result of the economic crisis resulted in Korea's stronger dependence on the subcontract production system. The number of subcontract orders, however, decreased noticeably. It is mainly because of the fact that labor costs are rising higher in Korea after this economic crisis

[8] All monetary units of this research are marked as US dollar, and $1 is converted into 1,200 Korean Won.

and that the number of countries that can produce animation with cheaper labor and advanced techniques is increasing so fast. These factors give countries placing orders more options to choose among more countries. China, Taiwan, Philippines, and Vietnam that have cheaper labors costs receive subcontract orders with about one-third amount of the production cost. According to Noh (2001), a 20-minute animation is produced for about $120,000-140,000 in Korea whereas China's costs are only $80,000 (p. 51).

This situation has affected the Korean animation industry directly. As is shown in Table 8, the amount of exports has decreased continuously. In 2000, about $126 million of animation were exported. Yet 2003 recorded about $76 million of exports, which means about a 40% decrease when compared with 2000. Considering that the biggest portion of exports is of subcontract orders, the decrease in exports is directly related to the decrease in subcontract orders.

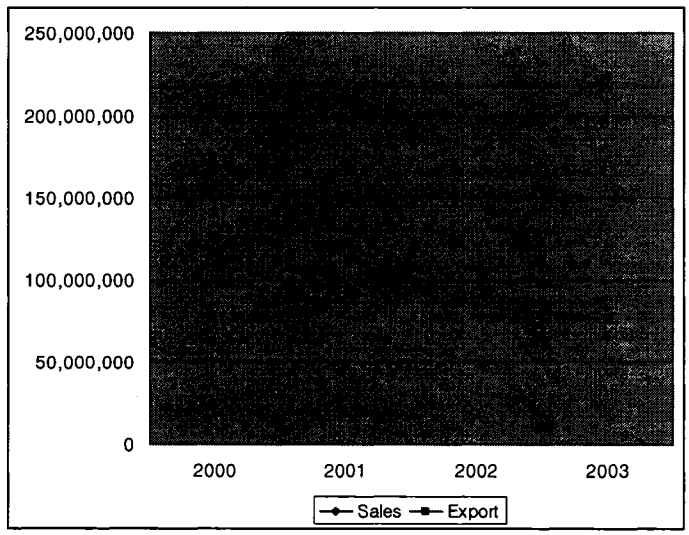

Figure 5. Market sales and exports of Korean animation.
Note. From *Animation saneob baekseo* [The white paper on the animation industry], by KOCCA, 2004, Seoul: KOCCA. Copyright 2004 by KOCCA. *Animation saneob baekseo* [The white paper on the animation industry], by KOCCA, 2005, Seoul: KOCCA.

The decrease of exports also changes the importance of exports in market sales (Figure 5). There is no big difference between market sales and exports in 2000, which means exporting animation played a crucial role in the Korean animation industry. However, it is possible to see that a great gap occurred in 2003. This gap infers that the importance of subcontract-based exports was lowered because exporting original animation was not yet large enough to affect the amount of exports.

Table 9. Animation Market Sales by the Type of Contract

	2000	2001
Original works	$21,465,000 (13.5%)	$89,460,000 (42.0%)
Subcontract	$131,016,000 (82.4%)	$122,049,000 (57.3%)
Sub-subcontract	$6,519,000 (4.1%)	$1,491,000 (0.7%)
Total	$159,000,000 (100%)	$213,000,000 (100%)

Note. From *2002 manwha saneob tonggye: aenimeishyun saneob* [2002 cultural industry statstics: Animation industry], by MCT, 2002, Seoul: MCT.

In the meantime, Table 9 shows more clearly that the importance of subcontract production has lessened. In 2000, subcontract-based production reached about 82.4% of the market sales. But it sharply dropped to about 57.3% in 2002. On the contrary, the total number of original works skyrocketed from 13.5% in 2000 to 42.0% in 2002. Thus, the balance between subcontract production and original work production became almost even in 2001.

The changing situation in Korea led to the self-recognition that the production system was imbalanced and to the necessity to change this long-lasting production system. The real problem caused by the subcontract-based production system is seen in Table 10. These numbers show the composition of workers and the rate of subcontract production.

Table 10. Composition of Workers and Subcontract Production Rate, 1999

Companies	The composition of workers		The rate of subcontract production	
	Planning	Producing	Subcontract (%)	Original works (%)
CDI	7	18	70	30
Dai Won	10	200	70	30
Geive Media	4	21	2	98
Ghom Moo Ri	14	X	X	100
Han Ho	10	600	90	10
Han Shin	X	50	60	40
Moon Sung	2	70	90	10
Orange	X	40	100	X
Sae Han	17	85	70	30
Seoul Movie	6	350	50	50
Sung San	3	70	100	X
Sun Min	13	13	100	X
Sun Woo	20	700	90	10
SY Animation	3	110	80	20
Tin House	X	8	90	10
Total	109	2,335	N/A	N/A

Note. From *Animation jejakeseo digital bangsikeu hwalyonge kwanhan yunku* [The research on the utilization of digital system in animation production], (p. 16), by S. N. Kang, 2000, Seoul: Hongik University.

In the case of the composition of workers, there are only 109 workers who can take charge of planning animation while 2,335 workers are involved with producing animation. More than 95.5% of workers are focused only on the main production process. Moreover, only 3 companies (Geive Media, Ghom Moo Ri, Seoul Movie) among the total 15 companies record the rate of planning original works as more than 50%. In addition, several companies such as Orange, Sung San, and Sun Min completely depend on subcontract-based production, a trend that clearly demonstrates how seriously the subcontract system has proliferated throughout the Korean animation industry. It is particularly important to mention that companies which have more than 500 workers, such as Han Ho and Sun Woo, are dependent on the subcontract for 90% of their production. Table 10 does not deal with the total number of companies in Korea, but, it reflects the situation of Korea because companies like Han Ho, Sun Woo, Dai Won,

Seoul Movie, Sae Han and Hans Shin are the largest major animation companies in Korea and practically have dominated the whole industry so far.

Table 11. Competitive Power Index in the Animation Industry, 1998

	US	Japan	Korea	Characteristics
Pre-production	100	100	30	The US and Japan: -They own a large number of specialists about making scripts -The process is efficiently subdivided. Korea: -Experts on developing characters, and designing mechanics are insufficient
Main-production	100	100	90	Korea: -Knowledge and experiences on making cell animation are abundant -Computer animation area is relatively inferior to the US
Post-production	100	90	30	-Quality of sound effects and background music is still lower than both the US and Japan.

Note. From *Seutori saneob hwalseonghwa bangane kwanhan yunku* [A study on the activation plan of story industry], (p. 35), by I. Y. Lee, 2002, Seoul: Sejong University.

Similar to this analysis, Choi (1999) also provides evidence of how prevalent the subcontract production type has been. He divides the animation production process into three steps, a categorization which is generally used to analyze the production process: pre-production, main-production, and post-production. With these steps, he compares Korea to other countries, the US and Japan, well-known countries in the animation production. In order to compare the competitive power of these three countries more objectively, the score of the US is set up as a yardstick with 100 points. As seen in Table 11, Korea has such a low score both in pre-production and post-production. Each process received only 30 points, which differs from the 90 points of the main-production. Except

for the case of main-production, there is a huge disparity between Korea and the other two countries.

Industrial analyses like those of Choi (1999) and Kang (2000) point out this unbalanced production system and allow people to realize that the problem in the animation industry is based mainly on cel animation-oriented process.

The Global Success of the US Digital Animation and The Open Door Policy on Japanese Popular Culture

While the reduction in subcontracts along with the perception of the production system problem are the reasons coming from within the industry, the global success of the US digital animation and the open door policy on Japanese popular culture are the environmental factors causing Korean animation producers to pay attention to digital animation. Starting with the tremendous success of *Toy Story* in 1995, the US has produced and released at least one feature-length digital animation every year. Most of these releases are 3D animation.

According to the site, The Numbers, that provides box office data of US digital animations, some digital animations recorded enormous financial successes not only at the US box offices but also in the global market.[9] For example, *Monsters, Inc.* (2001), *Finding Nemo* (2003), *Shrek 2* (2004), and *The Incredibles* (2004) earned more than $500 million in the global market. In particular, the global sales of *Shrek 2* went close to $1 billion. These successes of digital animations encourage Korean computer graphic companies that have devoted themselves solely to making digital images for commercials and related media to produce their own digital animation. Moreover, Japan was still

[9] Retrieved May 10, 2005, from www.the-numbers.com/movies/series/DigitalAnimation.php

immersed in the cel animation production industry due to the huge success of *Pokemon* (1997) and *Sailor Moon* (1992) in the global market that led Japan to maintain the traditional format. These circumstances led Korean companies to decide to convert to the digital format as fast as possible and thereby "leapfrog" Japan in the global market place.

Several computer graphic engineers who are interested in animation already had anticipated the success of digital animation. S. H. Hong who participated in *Wonderful Days* and is producing *Egg-cola* states:

> ...people engaged in CG areas like me already predicted the advent of 3D animation. But, all of a sudden, *Toy Story* was released in 1995 and stood in the midst of global spotlight. So, I realized the situation and decided to make ours. By that time, I could join the production of *Wonderful Days* and simultaneously promoted our project, *Egg-cola* (personal communication, October 13, 2005).

The second environmental factor influencing Korean animation producers is the open door policy on Japanese cultural products. Because of the unique historical background with Japan, that is, 35 years of Japan's colonization in the first half of the 20th century, all cultural products made in Japan have been prohibited officially from flowing into Korea for at least fifty years. This unique situation resulted in the establishment of the black market. The black market in Korea was related to mostly Japanese animation and comics. Yet, one issue to note is that although the feature-length format of animations was strictly prohibited, the made-for-television format of animations was imported and broadcast through public networks under tacit permission of the government. These made-for-television animations were broadcast after Japanese symbols or signs had been censored and deleted in advance. In addition, several Korean feature-length animations plagiarized Japanese animations without suffering any legal

sanctions. Because of this problematic market structure, the black market has prospered for many years by importing Japanese animation.

The changed attitude about cultural industries and the elucidation of globalizing Korea in the early 1990s, however, finally resulted in the activation of the open door policy. An open door policy, initiated from the late 1990s, has played a crucial role in heightening the recognition of Japanese animation that had been imported and consumed unofficially for some time. The full-scale opening is expected before 2010.

This open door policy has encouraged all production companies and even audiences about cultural and industrial influences to take note of the need to produce more original animation with a different format so that Korea can compete against Japanese animation.

Cultural Industries

The second industry is that of the cultural industries that Korea has selected for the purpose of recovering its depressed economy. The government encourages cultural industries and expedites academic and practical research on cultural industries. There are several reasons why cultural industries need to be concerned about the factors leading to the advent of digital animation.

The Paradigm Shift on Policy

The shift of the paradigm on the policy of cultural industries affects the development of digital animation. This changed attitude results from the change of perception toward cultural industries. Until the 1980s, Korea has exhibited extensive economic development through its export of light and heavy industry goods such as

textiles, steel, and microchips. But, after joining the OECD in 1993, Korea tried to identify new industry areas that would enable it to change its status from a developing to a developed country. As a result, cultural industries as well as the IT industry were chosen as the new national industries.

Table 12. Expected Effects of Cultural Industries

Cultural effects		Economic effects	
Direct	Indirect	Direct	Indirect
- Developing cultural democracy - Increasing cultural diversity	- Heightening the life quality - Improving cultural environment - Promoting the image of Korea	- Enlarging employment - Activating the economy - Industrializing culture	- Activating tour industry - Culturalizing industries - Accelerating other industries' advance into the global market

Note. From *Munhwa saneob baek seo* [The white paper on the cultural industries], (p. 4), by MCT, 2003, Seoul: MCT.

Moreover, the Korean government decided that cultural industries were the ones which would give Korea the competitive power on the basis of the following three factors. First, Korea already owned extensive content resources from time immemorial. Second, Korea regarded cultural industries as the pro-environmental area. Korea was facing side effects of the fully developed manufacturing industries such as air pollution and water pollution, and these side effects were becoming worse. Cultural industries were identified as the alternative to lessen these side effects. Third, Korea admitted that cultural industries were the high value-added area that had raised the local economy in a short time period. The local autonomy system that was initiated from 1995 provided the opportunity for local governments to reduce their financial dependency on the national government. Yet, since this also meant that local governments had to be responsible for

their own economies by themselves, they paid attention to cultural industries as the alternative way to activate local economies quickly. Local governments thus focused on the point that cultural industries were a more efficient way to induce production and employment when compared with other industries (Lee, B. M., 2003, p. 56). Table 12 lists the expected effects that can be made by cultural industries. Therefore, since cultural industries can create not only direct effects but also indirect effects both in culture and economy, the Korean government became interested in cultural industries.

These expected effects and societal factors related to cultural industries led to a change in the national policy. The main paradigm that culture should be controlled by the government changed into the new paradigm that culture itself should be raised as the industry and be supported positively (see Figure 6). Yim (2004) deals with this policy change in depth. He insists that this paradigm shift started from a recognition that cultural industries are the area that has the potential to create unimaginable economic value (p. 118).

Regulation		Support
- Moral/ethical value		- Economic value
- Establishing healthy culture	→	- Raising national and local economies
- the 1960s ~ the early 1990s		- the early 1990s ~ present
- Manufacturing industries		- Information industry, cultural industries

Figure 6. Paradigm shift on the policy of cultural industries.

The discourse about cultural industries that arose from the 1960s strongly favored regulation to control negative effects; this paradigm of regulation lasted until the 1980s. It was based mainly on the objective to control foreign culture, preserve traditional culture, and, furthermore, to raise the Korean popular culture that was so-called the "healthy

culture." This type of national policy on cultural industries limited the subject to traditional culture and high culture.

Table 13. Key Points of Cultural Policies by Political Regimes

Time period	Key values	Major support areas
After Liberation – 4th regime (1945-1980)	-Establishing cultural identity -Preserving and developing traditional cultural legacies	-Cultural legacies, traditional culture and art, Korean classical literature
5th and 6th regime (1981-1992)	-Promoting cultural creative capacity -Building cultural life foundation	-Art, cultural life, cultural sphere -Cultural legacies, traditional culture
Civic regime (1993-1998.2)	-Promoting cultural welfare -Globalizing culture and art	-Cultural welfare, cultural exchange -Art, cultural legacies, local culture
People's regime (1998.3-2003.2)	-Raising cultural content industry -Activating local culture	-Cultural content industry, local culture, cultural welfare -Art, cultural information, cultural exchange, cultural goods

Note. From *Jiyuk munhwa contents saneob hwalseonghwawa jeongchaek kwaje* [The activation of the local cultural content industry and the policy assignments], (p. 86), by KOCCA, 2003, Seoul: KOCCA.

Nonetheless, this regulation-based policy changed at the end of the 1980s, when the policy focusing on support rather than regulation came out in the early 1990s. Kim, Young Sam, who then became the first civilian president after the military regime to show interest in informatization and globalization, identified cultural industries as one of the prime movers to lead the Korean economy and placed much attention on the economic value of cultural industries (Civic regime in Table 13).

This change in policy was implemented as practical support plans in the next regime led by Kim, Dae Jung (People's regime in Table 13). At this time, many of the policy visions were announced including the Five-Year Cultural Industries Promotion Plan. Consequentially, several agencies and organizations such as Cultural Industry

Support Center—the predecessor of KOCCA—funded by the national government started their task of supporting cultural industries. Kim, J. S. (2004) mentions that this paradigm shift in cultural policies was led solely by the government and adds that activating local culture was emphasized from this moment.

Table 14. Changes in Cultural Industries Laws, Policies, and Political Environments

Year	Laws	Policies	Political environment
1993	X	-Culture Promotion Five-Year Plan	-Starting Civic Regime -Joining OECD
1994	-Enacting Visual Images Promotion Act	X	-Establishing Korea Culture Policy Institute
1995	X	X	-Operating local autonomy system
1996	X	-Media Valley Development Plan	X
1998	X	X	-Starting People's Regime -The 2nd civic local autonomy -Introducing Japanese popular culture
1999	-Enacting Cultural Industries Promotion Basic Act	-Cultural Industries Complex Promotion Support Plan	-Renaming as Korea Film Council (KOFIC)
2000	X	-Cultural Industries Vision 21 -Cultural Industries Promotion Five-Year Plan	X
2001	X	-Movie Industry Promotion Comprehensive Plan -Content Korea Vision 21	-Designating 7 local cultural industries complexes
2002	-Amending Cultural Industries Promotion Basic Act -Enacting Publishing and Printing Promotion Act	X	-Establishing Korea Culture and Content Agency
2003	X	-Designating cultural content industry as one of next generation leading industries	X

Thus, several changes in laws and policies appeared from the early 1990s [i.e., after the paradigm shift (see Table 14)] and research that focuses on local industries and economies also increases after the late 1990s. Cho, C. H. (2003), Choi, J. R. (2004), Chung, G. S. (2000), Lee, H. J. (2002), Shin, H. K (2004), and Yun, Y. J. (2001) are cases in point, and they generally deal with selecting fields of cultural industries and revising existing local cultural policies.

The Quantitative Growth

As mentioned previously, the Korean economy prior to the 1990s was driven by manufacturing industries. But, now the exportation of information technology-related products is currently playing a crucial role for maintaining the economy. As in Table 15, Korea's market share in manufacturing industries is worth noting. For instance, some areas such as shipbuilding and TFT/LCD areas record 32.4% and 40.7% in the global market. By contrast, in the case of the cultural industries area, the market share is significantly less. On the whole, there are no areas taking more than a 5% market share, and only broadcasting and character areas have 2.5% and 2.6% of market share each.

Table 15. World Market Share in Manufacturing and Cultural Industries, 2001

Manufacturing industries			Cultural industries		
Area	World market	Market share	Area	World market	Market share
Microchips	$139,000,000,000	5.7%	Movies	$67,700,000,000	0.7%
Shipbuilding	$46,000,000,000	32.4%	Animation	$75,000,000,000	0.4%
TFT/LCD	$14,400,000,000	40.7%	Game	$54,700,000,000	1.5%
Steel	$491,500,000,000	5.2%	Character	$122,000,000,000	2.6%
Memory	$24,900,000,000	25.4%	Broadcasting	$178,000,000,000	2.5%

Note. From *Munhwa contens saneobeu yukseong jeongchaeke kwanhan yunku: Game saneobkwa animation saneobeul jungsimeuro* [The culture and contents industrial policies in Korea: The case of game and animation industries], (p. 74), by H. S. Kim, 2004, Seoul: Dankook University.

However, considering the pace of development of cultural industries, it is expected that cultural industries would play a more important role in the Korean economy.

Table 16 shows the size and the growth of Korean cultural industries. There is no standardized calculation to measure cultural industries yet; numeric data compiled by several agencies are slightly different from each other while the subject areas that agencies deal with are also different. Due to this problem, Table 16 is made on the basis of data provided by the Ministry of Culture & Tourism.[10]

Table 16. Market Size of Korean Cultural Industries

Areas	2001	2002	2003
Publishing	N/A	$8,929,000,000	$12,934,000,000
Broadcasting	$5,137,000,000	$7,936,000,000	$5,947,000,000
Commercials	N/A	$5,398,000,000	$5,886,000,000
Movies	$863,000,000	$1,009,000,000	$1,954,000,000
Animation	N/A	$179,000,000	$224,000,000
Music	N/A	$924,000,000	$1,494,000,000
Game	$2,531,000,000	$2,836,000,000	$3,282,000,000
Character	$3,433,000,000	$4,397,000,000	$4,007,000,000
Total	N/A	$31,608,000,000	$35,728,000,000

Note. From *Munhwa saneob baek seo* [The white paper on the cultural industries], (pp. 22-23), by MCT, 2003, Seoul: MCT. Copyright 2003 by MCT. *Munhwa saneo baek seo* [The white paper on the cultural industries], (pp. 25-29), by MCT, 2004, Seoul: MCT. *Hanryu siltae paakeul tonghan kwalseonghwa bangan yunku* [The study on the plan to activate the Korean Wave], (pp. 3-4), by MCT and KOFACE, 2005, Seoul: MCT & KOFACE.

The total worth of the cultural industries was about $31.6 billion in 2002, and showed about 13% of growth in 2003 reaching $35.7 billion. In 2003, the publishing area ranked as the largest area with $12.9 billion, and broadcasting and commercials ranked the second and the third with $5.9 billion and $5.8 billion each. Meanwhile, characters

[10] This is mentioned in the conclusion as a limitation of the research.

made $4.0 billion, games were $3.2 billion, movies recorded $1.9 billion, music had $1.4 billion, and animation ranked last with $224 million.

When these markets are compared with 2002, most areas showed growth except for the broadcasting and character areas. The character area showed a decrease of about 8.9% from $4.3 billion to $4.0 billion. Broadcasting also dropped from $7.9 billion to $5.9 billion and demonstrated an about 25% decrease rate. The decline in these two areas can be explained by one special reason: the 2002 World Cup soccer game hosted in Korea and Japan. Unlike other areas, character and broadcasting were directly connected to this special world sports event.

Character area could enjoy a boom in 2002 but too many stockpiles went into the next year, 2003. This accumulation of stockpiles resulted in the character area having a hard time in 2003. However, the decreased rate of the broadcasting area was much greater than the character area. It was originally supposed to show an increase even in 2003 because of some special demands such as the appearance of DMB and the export of television dramas. Nonetheless, the broadcasting area also was affected by the decrease of special income coming in from the World Cup commercials.

Still, these trends do not indicate that both areas of broadcasting and character were withered because they just reverted to a normal growth rate in 2003. Their perseverance can be confirmed by comparing the years of 2001 and 2003. While the broadcasting area showed a 15.8% increase, the character area rose at the rate of 16.7%. In summary, all areas of cultural industries generally showed a significant growth in the early 21st century.

Korea's entrance into the global market was also intensified after entering the 21st century. Games, movies, music, and broadcasting areas constantly tried to advance into foreign markets. On-line games became introduced in the Chinese market on a full scale, while television dramas and music were exported heavily into the Asian markets. The Korean Wave came on the scene with these cultural areas.

The export results of cultural industries are in Table 17. In 1999, a total of approximately $344 million in products were exported. This amount increased to $439 million in 2002 and was expected to reach $547 million in 2003. That is, about a 59% increase rate was expected to occur in the next 4 years.

Table 17. Cultural Products Exports

	1998	1999	2000	2001	2002	2003*
Publishing	$54,729,000	$62,152,000	$64,207,000	$67,809,000	$75,876,000	$78,000,000
Broadcasting	$10,017,000	$12,736,000	$13,111,000	$18,920,000	$28,813,000	$37,450,000
Movies	$3,074,000	$5,969,000	$7,054,000	$11,250,000	$15,014,000	$34,000,000
Animation	$85,000,000	$81,663,000	$85,000,000	$121,360,000	$89,190,000	$77,310,000
Music	$8,615,000	$8,154,000	$7,923,000	$7,385,000	$4,231,000	$3,205,000
Game	$82,262,000	$107,657,000	$101,500,000	$130,470,000	$140,796,000	$211,000,000
Character	N/A	$65,766,000	$69,228,000	$76,920,000	$86,000,000	$107,000,000
Total	$243,697,000	$344,097,000	$348,023,000	$434,114,000	$439,920,000	$547,965,000

Note. * Figures of 2003 are the estimated data. From *Munhwa saneob baek seo* [The white paper on the cultural industries], (p. 130), by MCT, 2003, Seoul: MCT.

In addition to this significant growth in cultural industries, more and more research analyzing strong and weak points of the Korean cultural industries are now open to the public. Commonly mentioned points are listed in Table 18. For example, in the animation industry, many examples of producing animation and well-connected industries such as information and communication technology are strong points, but the

shortage of experts and of the knowledge about handling pre-production stage along with the long-term period required to withdraw loans are listed as weak points.

Table 18. Strong and Weak Points of the Korean Cultural Industries by Areas

Areas	Strong points	Weak points
Movies	-The competitive power that is strengthened -Improved infrastructure such as theaters and financial funds	-The shortage of original scripts -The big-sale complex
Broadcasting	-Possessing plenty of men of ability -Lots of audience who show deep trust on TV	-Habitual practices to make unfair contracts
Music	-Lots of passionate teenager fans -Trustable domestic demand	-Marketing strategy focusing only on PR -Copyright problems
Game	-Excellent high-broadband networks -Unique game culture such as PC rooms	-Problems with violence and addictiveness -Domination of few major foreign brands
Animation	-Lots of production experience -Well-connected infrastructure	-The shortage of pre-production teams -The long-term period to withdraw loans
Character	-Experience to success in some sub-areas such as avatar -Well-established business model on mobile content	-The solution shortage about illegal reproduction and distribution -The shortage of globalized items

Note. From *Munhwa maketingeul yiyonghan hankukeu kukka eemiji jego bangan yunku* [A Korean national image study utilizing cultural marketing], (p. 50), By H. K Choi, 2004, Seoul: Yonsei University.

Introducing the Concept of Cluster

The third point in cultural industries is the introduction of the cluster strategy. Since 1995, local autonomies as well as the national government strongly attended to cultural industries as the area to maximize effects with minimal investment and to raise local economies in a short time. Therefore, the government decided to build up systemized practical frameworks available for every local area, resulting in the introduction in Korea of the cluster strategy.

This cluster concept is intended to reduce production cost and ensure competitiveness through taking advantage of physical proximity. According to Park, et al. (2001), the development of cultural industries in local areas stimulates the growth of cities, diversifies city culture, helps cities to establish their own global networks, and assists the globalization of local cities. These advantages led Korea to initiate the cluster strategy for the purpose of developing local economies and of solving a deep-seated problem, that of the imbalance in economic development (pp. 41, 44).

Korea, whose economy was totally destroyed during the Korean War, achieved industrialization in the fourth quarter of the 20th century. This process was possible with the Economic Development Five Year Plan, and the national government took the absolute lead for a long time. Yet in the down side of the economic growth, there were side effects. Specifically, the national capital region centered in Seoul became too overpopulated while economies of local areas lagged too far behind. In order to solve these problems as well as decentralize the authority of the national government, Korea authorized local autonomy from 1995 and designated cultural industries as the leading industry to support local economies. The cluster strategy thus was introduced on the basis of this societal context (MCT, 2003, p. 111; Lee, B. M., 2003, p. 53).

Practically, a similar type of cluster model had already been applied to Korea for some time. Industrial complexes such as the Changwon Mechanic Complex and the Kumi Electronic Complex were built in the 1960s. These industrial complexes can be regarded as similar to the cluster. Both select specific areas and industries and develop them extensively. However, there are several differences between them (see Table 19).

Table 19. Characteristics of Industrial Complex and Cluster

	Industrial complex	Cluster
Relationship between live-in companies	Low (Competition or non-interest)	High (Competition and cooperation)
Benefits	-Low lease and loan -Utilizing public infrastructure	-Chances to manage business projects -Participating networks
Example	-Ulsan industrial complex -Masan free-trade zone	-Silicon Valley

Note. From "Clusteringeul tonghan jiyuk IT saneob yukseongbangan" [Local IT industry development plan based on clustering], by N. H. Kim, 2002, *Jeongbo Tongshin Yunku, 12*, p. 150.

In the case of the cluster, companies and research institutes dealing with similar types of business work together within a cluster area. In this way, all components such as companies, research institutes, and educational organizations in the value chain need to cooperate with one another. And, at the same time, companies have to compete with one another (see Figure 2). To put it differently, in the value chain of the cluster, the vertical cooperation and the horizontal competition co-exist in one cluster. Yet in the case of the industrial complex, any kind of business can work. Therefore, companies dealing with different businesses do not need to concern themselves with other companies. The competition among companies handling the same type of business, however, exists in an industrial complex.

Secondly, whereas the industrial complex is the cost-reduction type, the cluster is the profit-maximization type. Through using public infrastructure and low leases and loans, companies in the industrial complex can curtail the production cost and export their products at a cheaper price. Meanwhile, the cluster focuses on developing highly advanced products and on maximizing profits. In addition, by increasing opportunities to

create regional networks, the cluster enhances the development of local areas. Because of these advantages, the Korean government adopted the cluster strategy for its cultural industries.

The Ministry of Culture & Tourism (MCT) selected seven cities as cultural industry clusters in 2001. In the first selection, Bucheon, Chuncheon, Daejeon, and Chungju were chosen. Kwangju, Jeonju, and Kyungju were added during the second selection process. Table 20 contains the selected cities and industry areas.

Table 20. Seven Designated Cultural Clusters

Cities	Areas	Main project plans	Selection
Bucheon	Comic books, Animation	-Comic book information center -Animation support center	1st
Chuncheon	Animation	-Total information center -Research and Production center	1st
Daejeon	Visual images, Game	-Production studios -Game academy	1st
Chungju	Educational game	-Content academy -Multiplex theaters	1st
Kwangju	Character, Visual images	-Visual art center -Cultural products development center	2nd
Jeonju	Digital images, Sound	-Digital image media center -Sound content center	2nd
Kyungju	Virtual reality industry	-Cyber experience hall, and culture exhibition hall -VR land	2nd

These selected cities followed three steps of a development plan that are intended to be completed in the year 2010. Each step has its own key points for operation (see Figure 7). The first step establishes the master plan and strategy, and prepares to build up the infrastructures. In the second step, each city chooses companies, research institutes,

and related-organizations and assists them to settle within each city. Each city needs to focus on composing its own network. The last step includes developing local cultural industries as well as creating global networks by themselves.

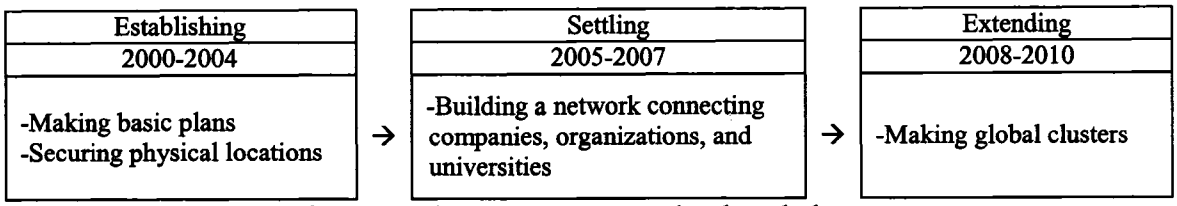

Figure 7. Three steps to propel cultural clusters.

Ok, S. S. (2004) points out that this cluster stage precedes the next more extensive cluster phase (see Table 21). Ok maintains it is necessary to connect nearby locations and similar industrial areas. Moreover, he suggests that it is possible to make three extensive clusters: the mid cluster, the southeast cluster, and the southwest cluster. These extensive clusters are intended to enhance the synergy effect as well as to work as bases for a larger cluster that make up the Korean cluster in the global market (p. 36). This process means that locals can become globalized in their own ways, thus connecting the process of regionalization to globalization.

Table 21. Extensive Cultural Clusters

The extensive region	Cities	Areas
The mid region	Bucheon, Chuncheon	Comics, animation
The southwest region	Daejeon, Chungju, Jeonju, Kwangju	Special effect, tradition culture, cultural technology R&D
The southeast region	Kyungju, Busan	Films, games

These three factors within the work of cultural industries appear to be the main catalyst for the advent of digital animation. That is, both the changed paradigm on

cultural policy and the quantitative growth of cultural industries has focused people's attention on every area of cultural industries and encouraged producers of cultural industries to devote themselves to creating more cultural products. Animation producers are not the exception from this societal situation in their focus on developing a new type of animation that can help develop the industry. In addition, the cluster strategy chooses animation as one of its ways to improve local economies, thus resulting in the recognition of animation as one of the crucial industries for the development of local economies. These factors in cultural industries provide an opportunity to reevaluate the importance of animation as a cultural industry because it is underdeveloped compared to other areas of cultural industries (see Table 16). Therefore, societal factors of cultural industries have contributed to the development of digital animation.

Information and Communication Technology Industry

The last industrial area that needs to be considered in an examination of digital animation is the information and communication technology industry. From the late 1990s, Korea has focused on encouraging the development and production of ICTs (information and communication technologies) in order to rehabilitate the economy from the economic crisis sweeping most Asian countries. These ICTs provides a vital foundation for the development of the digital animation industry.

Cultural industries including digital animation can take advantage of growth in information and communication technologies such as the high-broadband network and highly advanced storage technologies efficiently. Using these technologies as hardware, cultural industries can maximize their own economic values (Lee, Y. D., 2002, p. 300).

The Quantitative Growth

One of the reasons why this industry needs to be addressed in an explanation of the advent of digital animation is the rapid growth of the information and communication technology industry. Well-established technologies can work as the hardware that provides opportunities for producing highly advanced digital animation.

With the motto that Korea can go ahead in informatization even though Korea has fallen behind in industrialization, Korea entirely devoted itself to developing information and communication technologies from the late 1990s. This strategy was undertaken also to overcome the economic crisis that was shaking the whole economic foundation. Thanks to this societal situation, it was possible to build up networks connecting the whole country and to recover the economy within a short time. The government thus demonstrated a positive attitude through its diverse presentation plans to promote this industry.

Table 22. Spread of Information Technologies in Korea

	1998	1999	2000	2001	2002	2003
No. of high-speed Internet users	10,000	370,000	3,950,000	7,810,000	10,410,000	11,180,000
No. of Internet users	3,100,000	10,860,000	19,040,000	24,380,000	26,270,000	29,220,000
No. of PCs	8,270,000	11,530,000	18,620,000	22,490,000	23,500,000	26,740,000
Size of e-business	N/A	N/A	$48.3 billion	$99.1 billion	$148.3 billion	$195.8 billion

Note. From *Jeongbohwae kwanhan yuncha bogoseo* [The annual report on the informatization], (p. 7), by MIC, 2004, Seoul: MIC.

Table 22 explains how fast this industry was developed in Korea. In 1998, only about 10,000 people subscribed and used high-speed Internet service. But, five years later, one quarter of the entire population—about 11.18 million people—became members of high-speed Internet service. The number of Internet users also showed rapid growth. About 3.1 million people were using the Internet in 1998, but, 29.2 million were recorded in 2003. This means about 65% of the whole population was using the Internet. In addition, the number of personal computers and the size of electronic business made a quantum leap.

The result of the rapid growth is clearer when compared to other countries. Korea showed higher scores both in the subscription rate of high-speed Internet service and the number of Internet users (see Table 23). In particular, the subscription rate of high-speed Internet service reflected much higher penetration rates compared to the US and Japan. While the US and Japan showed 4.5 and 2.2 subscribers per 100 people in high-speed Internet service, Korea showed almost 22 per 100 people. This contrast suggests that the highly advanced Internet is already popular among ordinary people.

Table 23. High-Speed Internet Subscription Rate and Number of Internet Users, 2002 (Korea, the US, Japan)

	Korea	US	Japan
Subscription rate of high-speed Internet service	21.8/100	4.5/100	2.2/100
Number of Internet users	55.1/100	50/100	45.5/100

Note. From *21 seghi jisik jeongbo kangkukeul hyanghayeo: Jinan onyungan IT jeongchaek seongkwawa kwaje* [Toward the major knowledge and information country in 21st century: Result and report on the past five years of IT policy], (p. 8), by MIC, 2003, Seoul: MIC.

If Tables 22 and 23 illustrate how rapidly information technologies are spread from the viewpoint of consumers, Tables 24 and 25 show the development of information technologies on the basis of production. Table 24 tells the number of people who are engaged in this industry, and Table 25 gives the results about international trade. In the case of workers and companies, there were about 920,000 people and about 10,218 companies in 1998, which grew to 1,220,000 people work at 22,127 companies in 2002. Thus, there is an increase of 24.6% in workers and of 217% in companies over 4 years.

Table 24. Number of Workers and Companies in the IT industry

	Number of workers	Number of companies
1998	920,000	10,218
1999	1,020,000	12,383
2000	1,110,000	13,944
2001	1,116,000	17,719
2002	1,220,000	22,127

Note. From *21 seghi jisik jeongbo kangkukeul hyanghayeo: Jinan onyungan IT jeongchaek seongkwawa kwaje* [Toward the major knowledge and information country in 21st century: Result and report on the past five years of IT policy], (p. 71), by MIC, 2003, Seoul: MIC.

Table 25. Importance of the IT Export in the Total Export

	Total export	IT export	IT profit	IT export in total export
1998	$132,300,000,000	$30,500,000,000	$12,300,000,000	23.1%
1999	$143,700,000,000	$40,000,000,000	$13,400,000,000	27.8%
2000	$172,300,000,000	$51,200,000,000	$15,700,000,000	29.7%
2001	$150,400,000,000	$38,400,000,000	$10,600,000,000	25.5%
2002	$162,800,000,000	$46,400,000,000	$16,800,000,000	28.5%

Note. From *21 seghi jisik jeongbo kangkukeul hyanghayeo: Jinan onyungan IT jeongchaek seongkwawa kwaje* [Toward the major knowledge and information country in 21st century: Result and report on the past five years of IT policy], (p. 69), by MIC, 2003, Seoul: MIC.

Table 25 explains the importance of IT exports in the total of Korean exports. Exportation of IT-related products has kept the balance in the black from 1998. In

addition, the average percentage that the IT exports represented among total exports was about 28.5% in 2002 meaning that total exports are heavily dependent on the IT export. That is, the IT exports play such an important role in the Korean economy through its creation of steadily high profits.

The importance of the information and communication technology industry is confirmed again through Table 26, which shows the importance of the IT production in the Korean GDP. The production of the IT-related products has increased ceaselessly, and the importance of the Korean GDP also increased from 9.3% in 1998 to 14.9% in 2002. This trend definitely means that the IT industry is growing into a leadership position within the Korean economy.

Table 26. Importance of the IT Production in the Gross Domestic Product (GDP)

	IT production	Percentage in GDP
1998	$73,300,000,000	9.3%
1999	$95,800,000,000	11.2%
2000	$120,800,000,000	13.1%
2001	$125,000,000,000	12.9%
2002	$157,500,000,000	14.9%

Note. From *21 seghi jisik jeongbo kangkukeul hyanghayeo: Jinan onyungan IT jeongchaek seongkwawa kwaje* [Toward the major knowledge and information country in 21st century: Result and report on the past five years of IT policy], (p. 69), by MIC, 2003, Seoul: MIC.

Table 27. Importance of the IT Industry in GDP, 2002 (Finland, Korea, the US, Japan)

Finland	Korea	US	Japan
15.6%	14.9%	11.1%	9.6%

Note. From *21 seghi jisik jeongbo kangkukeul hyanghayeo: Jinan onyungan IT jeongchaek seongkwawa kwaje* [Toward the major knowledge and information country in 21st century: Result and report on the past five years of IT policy], (p. 12), by MIC, 2003, Seoul: MIC.

Meanwhile, Table 27 compares four major IT countries and shows that the importance of the IT industry in Korea is greater than the others. Korea is similar to Finland, which is noted for its IT industry and is greater than both the US and Japan.

These data, in their illustration of such factors as the size of production and export, are helpful in confirming the importance of the information and communication technology industry in Korea. Yet, in order to reach more objective figures, the Korean government annually announces figures of national informatization. The national informatization index has four main categories—computers, Internet, telecommunication, and broadcasting—as well as nine sub-categories—PC, Internet, telephone, television, etc. The distribution rate of each category is calculated and summed; then fifty countries in the world are ranked on the basis of this national informatization figure.

Table 28. National Informatization Index

	Informatization score				Informatization rank			
	1997	1999	2001	2003	1997	1999	2001	2003
Sweden	96	94	94	96	4	3	2	1
Denmark	91	94	94	96	6	4	5	2
US	99	99	99	95	1	1	1	3
Switzerland	87	89	89	94	7	8	6	4
Iceland	N/A	N/A	N/A	91	N/A	N/A	N/A	5
Canada	92	92	88	89	5	7	7	6
Korea	55	70	79	89	22	19	14	7
Netherlands	85	92	93	86	9	5	3	8
Norway	99	96	92	86	2	2	4	9
UK	72	79	80	85	15	12	12	10

Note. From *Jeongbohwae kwanhan yuncha bogoseo* [The annual report on the informatization], (p. 11), by MIC, 2004, Seoul: MIC.

According to the results of 2004, some northern Europe and North America countries generally take the higher positions followed by some Asian countries such as Korea, Hong Kong, and Singapore. Conversely, Central and South American countries

and Southeast Asian countries mostly occupy the lowest positions. Table 28 shows the top 10 countries among the total 50 countries on the basis of the 2003 score. Among these countries, Korea has the greatest significant growth. In 1997, Korea was ranked as 22nd. Since then, Korea broke its own record every year and finally entered the top 10 list in 2003.

All the data shown in this section explain that the information and communication technology industry has grown rapidly and constantly, and moreover it is one of the most important industries leading the Korean economy. This technological background can provide digitally converted culture such as digital animation with great opportunities to mature with minimum effort.

The Advent of a New Type of Media: DMB

The second characteristic in the information and communication technology industry is the diversification of the media type. With currently diversified media such as network television, cable television, and satellites, there are more newly emerging media such as IPTV and DMB. Among these, it is useful to focus on Digital Multimedia Broadcasting (DMB) because one of the DMB types, the terrestrial DMB, was commercialized in Korea first.

DMB is the broadcasting service that converts diverse multimedia signals—for example, voice and videos—into digital signals and provides service through convertible receivers. It is similar to Digital Audio Broadcasting (DAB), which came out earlier than DMB. DAB currently provides service in several countries, including the US. DAB, invented in the UK in 1995, did well in Europe and was introduced to Korea in 1997.

When Koreans found out that DAB could provide moving pictures as well as text service, this service developed into DMB. DMB is generally divided into two types: one is the terrestrial type (T-DMB) and the other is the satellite type (S-DMB). T-DMB uses signals that emanate from ground bases while S-DMB utilizes signals from satellites. Whereas the former can provide three video, nine audio and nine data channels, the latter can service thirty video, sixty audio and ten data channels (Ahn, 2004). Technically, S-DMB can deliver more services, but it is being served with subscription from January, 2005. T-DMB, however, is offered free of charge.

Table 29. Expected Effects of the DMB Industry

	2004	2005	2006	2007	2008	2009	2010	Total
Expected output	$15.83 million	$43.25 million	$107.83 million	$212.67 million	$339.5 million	$482.83 million	$612.5 million	$1,814 million
Expected value-added Effects	$13.25 million	$36.17 million	$90.17 million	$177.83 million	$283.83 million	$403.67 million	$512.08 million	$1,517 million

Note. From *Jeongbo tongshin baekseo* [Telecommunication white paper], (p. 305), by MIC, 2004, Seoul: MIC.

There are two reasons why DMB is more noteworthy relative to other newly developed media services. First of all, T-DMB service was developed by Korea first.[11] Therefore, if T-DMB service is spread worldwide, it is highly probable that the technological standard developed Korea that will be chosen as the world standard. In addition, it is expected that the economic effects from this new type of service will be immense. In the coming seven years, about $18 billion of expected output in production and about $15 billion of expected value-added effects will be made (see Table 29). Also,

[11] The satellite DMB service was created by Japan.

it is estimated that about new 240,000 jobs will be created (Kim, Y. S., 2004; MIC, 2004b, p. 305). In particular, since one DMB machine can handle telephone, Internet, and television services altogether, the DMB phone market also will be extensive enough to challenge the current cellular phone market.

Second, it is expected that there will be an increase in the demand for cultural products, including digital animation, for this new broadcasting service. According to KOCCA (2005), drama (40%), music (39%), news/weather forecast (32%) and movies/animation (25%) will be the most strongly demanded content for the DMB service (p. 30). Several content business companies already show movement toward creating a consortium to engage in the DMB business. In addition, not only small and mid size content production companies but also major Internet portal site companies are preparing for the DMB service (Cho, J. E., 2004).

Introducing a New Social Paradigm: The Ubiquitous Society

The third characteristic that needs to be explored in the information and communication technology industry is the introduction of a new paradigm: the establishment of a ubiquitous society. The ubiquitous society is one whereby users, regardless of time and space, can connect to the network and acquire information. This concept was created by Mark Weiser who was a chief scientist of Xerox PARC in the late 1980s. This society is the new concept toward 5C (Computing, Communication, Connectivity, Contents, Calm) and 5 ANY (Anytime, Anywhere, Any network, Any device, Any service), and is predicted to become a unity that converges general factors from every area such as economy, politics, and telecommunication (Cho, Y. I., 2004, p. 307).

Features of the ubiquitous society are confirmed and compared with other societies in Table 30. The ubiquitous society is the concept that is developed from the concept of the information society, that considers human senses and that perceives content as the crucial factor in managing this society. In addition, through switching from the concept of WWW (World Wide Web) to HHH (Hand Held Heaven), this society provides everything in terms of the shape of information, and information becomes content software to fill hardware. That is, this society strives for a HHC (Hand Held Culture) (KOCCA, 2003c, pp. 5, 8).

Table 30. Features of Industrial, Information, and Ubiquitous Society

Society	Industrial Society	Information Society	Ubiquitous Society
Period	19th & 20th centuries	Late 20th century	21st century
Keywords	Production, energy, machines	Technology, IT, digital	Content, convergence
Sphere	Physical space	Electronic space (anytime)	Converging electronic and physical space (anytime, anywhere)
Characteristics	Exchange and growth through reducing the physical space	Digitalization of activities and capacities of physical space	High-speed Internet, technology, wireless Internet, humans' sense, culture
Consumers	Simplicity, uniformity	New products, high capacity	Humans' sense and individualities

Note. From *Yubiqweoteose sidaega munhwa contents saneobe michineun yunghyang* [The influence of a ubiquitous society on the cultural content industry], (p. 5), KOCCA, 2003, Seoul: KOCCA.

The main reason for introducing this new concept at this moment is that Korea has experienced rapid growth in developing information technologies and is establishing network infrastructure connecting nationwide. Moreover, it is time for Korea to converge

all of its information technologies and to become a world pioneer in establishing a new type of society (MIC, 2004a, pp. 47, 48).

The shape of society to which Korea aims on the basis of its IT technologies is seen in Table 31. In the period of a ubiquitous society, humans and objects are connected to the U-sensor, that is the Ubiquitous Sensor Network (USN), by way of Radio Frequency Identification (RFID). Life being operated in the physical space thus is converged with virtual space, and the mutually connected networks enable people to exchange and share any kind of service and information.

Table 31. Transition of the Information Technology Features

Phone lines (modem)	High-speed network (DSL, etc.)	Broadband network (BcN)	U-sensor networks (USN)
Analog period	Digital period	Digital convergence period	Ubiquitous period
1980s-1994	1995-2002	2003-2007	2007-
Automatized society	Information society	Knowledge-based society	Intelligence-based society
Establishing DB	Spreading the Internet	Integrating services	Converging humans, objects, and computers

Note. From *Jeongbo tongshin baek seo* [Telecommunication white paper], (p. 12), by MIC, 2004, Seoul: MIC.

The completion of making a ubiquitous society in Korea is referred to as u-Korea, and an operation plan has already been made (MIC, 2004a, p. 53). The introduction of a new paradigm also emphasizes the importance of content. J. M. Lee confirms this point by stating:

> Personally, I think, in the 1990s, making hardware without preparing software, that is, content, would result only in the introduction of foreign content, especially Hollywood content. But, the sudden change in Internet related-network environment occurring from the late 1990s makes Korea as the test bed to experiment every kind of content in the world. Even some used to say that something that is successful in Korea can succeed in other countries. This means the development of information and communication technology industry provides a chance of distributing

> animation. Movements made by several major telecommunication companies to merge animation companies can be explained in this way. On the whole, those companies emphasize the vehicle most among the vehicle, content, and interface. But, their movements certainly imply that they also recognize the importance of content. That is to say, the modern world is going toward the society using more content (personal communication, October 19, 2005)

Cho, Y. I. (2004) also conveys a similar viewpoint. The concept of a ubiquitous society replaces the whole societal structure horizontally, which means content can be used in every different platform. That is, content can be used not only by existing media such as television and DVD, but also everywhere. In this process, the concept of information and content becomes identical. Since this ubiquitous society intends to achieve the HHC, the quantity and quality of content that users are able to choose and utilize would be assessed, and cultural products including digital animation would be heavily in demand in terms of content.

Chapter Summary

There are several phenomenons supporting the advent of digital animation, and they are categorized by industries: animation industry, cultural industries, and information and communication technology industry (see Figure 8).

Within the animation industry, there are two contributing factors: one is the reduction of subcontract-based production and the other is the global success of the US digital animation and the open door policy on Japanese culture. These two factors lead to the demand for the production of original animation works that need to be competitive in the global market.

In the case of cultural industries, the factors supporting the development of digitalized animation include the paradigm shift on cultural policy, the quantitative

growth of this industry as well as the cluster strategy. The animation industry, that has been underdeveloped compared to other areas of cultural industries, uses these societal factors as stepping-stones for its growth as an important cultural industry. Consequentially, this industry realizes the necessity for the development of a different type of animation—that is, digital animation.

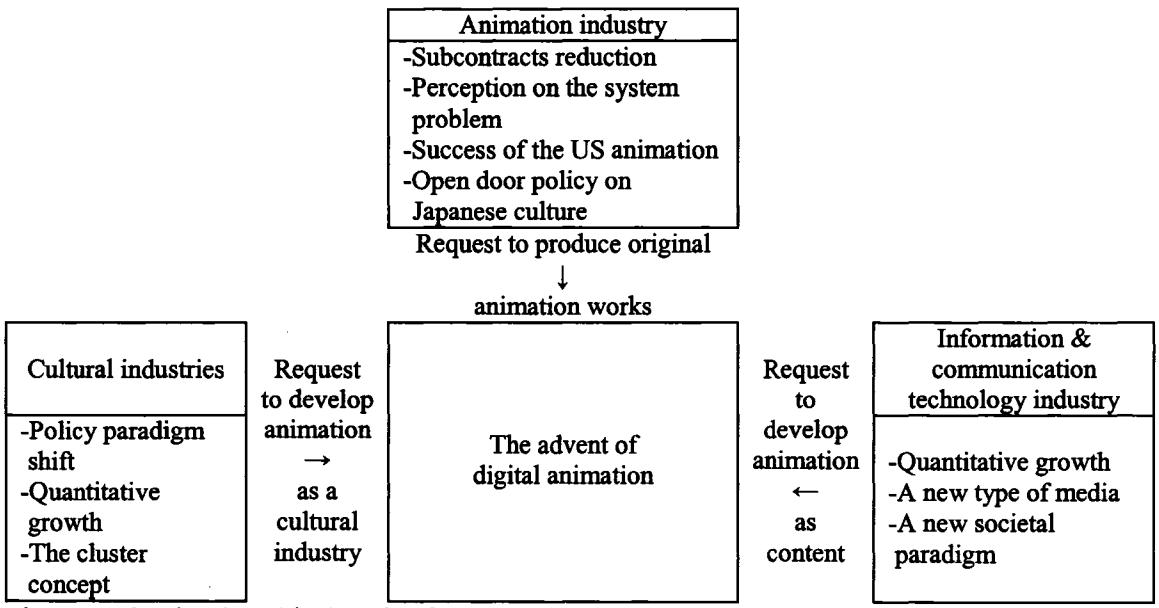

Figure 8. Societal and industrial factors of three related industries that lead to the advent of digitalized animation.

Moreover, the quantitative growth of the IT industry and the introduction of a new type of media, the DMB, as well as a new societal paradigm, the ubiquitous society, lead to the necessity of animation as digitalized content.

These environmental and societal factors that have taken place from the 1990s have confirmed the importance of animation in Korea as content and accelerated the process of digitalization in order to make the animation industry more competitive nationally and internationally.

CHAPTER 5

CHANGED CHARACTERISTICS OF DIGITAL ANIMATION

Chapter Introduction

Chapter 5 examines the current status of Korean digital animation and characteristics of this industry, and presents a strategy for this industry to become globalized by way of embodying regionalization. Research questions to analyze these points are as follows:

1-b. How has Korean digital animation developed?

1-c. What are the main features of Korean digital animation?

The proposition for these research questions is that digital animation shows different characteristics when compared to cel animation.

On the basis of these research questions and the related proposition, this chapter deals with four key points. First of all, the development of digital animation as an industry is analyzed. Second, this chapter shows several significant characteristics that are regarded as key features of the Korean digital animation. Third, this chapter explains the One Source Multi Use strategy (OSMU) that is applied to digital animation. And fourth, the co-production issue, which is the factor composing regionalism, is analyzed.

The Development and the Current Status of Digital Animation

Korea, stimulated by the global success of the US digital animation, began to show interest in digital animation and to release its own digital animation from the late 1990s. Moreover, digital graphic technologies became more important in the process of

making animation enabling most Korean animation to be regarded as digitally made animation. There are several ways to categorize animation, but generally animation is divided into four formats by media usage: feature-length format, made-for-television format, Flash format, and independent format. This research is limited solely to the feature-length and made-for-television formats. Flash format animation, which is available to the public mostly through the Web, is recently showing a rapid increase as a part of the industry. Nonetheless, it is premature to mention this format from an industrial perspective. In the case of the independent format, its main purpose is not to be financially successful in the market but rather to pursue artistic value. Due to these reasons, both the Flash format and independent format are not included in this research.

Current Industrial Status

In general, it used to be thought that 3D animation such as *Toy Story* and *Shrek* were only true digital animation. But other animation, such as the combination of 2D background and 3D characters, is also digital animation. Moreover, animation that is basically cel animation, but takes advantage of computer-based processes, partially can be called digital animation. Particularly, as more animation works use computer graphic technology for the purpose of increasing the production process efficiency, it is not an overstatement to note that most Korean animation is digital animation.[12]

Lee, S. B. (2001), who wrote a book dealing with the development process of the Korean digital animation, also underscores this point:

[12] This research deals with only 2D+3D type and 3D type as digital animation.

> As of August 2000, Korean animation is almost not using cel animation procedure. Instead, most production companies are using digital animation production software, such as Retas Pro, Toonz, US animation, GIGA Concept, Animo and are adopting the digital process that does not need to use cels, dyestuffs, and films at all (p. 6).

Some respondents who were interviewed for this research, such as I. Yu, B. M. Lee, and an anonymous interviewee, also mention this point. Before starting the interviews, they commonly insist that almost all Korean animation currently made can be regarded as digital animation.

Meanwhile, M. S. Kim says that being digital is indispensable in Korean animation. His comment is based on the point that digitalization can overcome the limitations of expression in movies and animation, but it is possible to infer from this comment that every kind of cultural product would be digital in the future. Animation, as one of the cultural products, is also following this trend, and digitalization enables Korean animation to reach the level of animation created by major animation production countries, especially, the US.

> It is, I think, the digital that can be suggested as our alternative. As you know, a movie is a medium that is shot by cameras. But, a movie that is drawn can show our imagination much better. Therefore, I surely think drawn movies will come to us much sooner in the near future and being digital is the way to draw movies. That's why I think there's no such thing like being digital. *The Lord of the Rings* is a digital movie, and this kind of movie will develop more than anything else (personal communication, May 9, 2003).

The main reason why Korea is so concerned with producing digital animation is the scarcity of 3D digital animation. There are still not many countries that can produce feature-length format of 3D animation based on their own knowledge, experience, and equipment. Even though there are several countries—for example, Canada, Japan, Korea, India, and Spain—that show strong interest in digital animation, no digital animation

made by other countries except for the US has succeeded in business so far. Even Japan, noted for its anime, released its first 3D feature animation, *Alice*, only in 1999. Conversely, this situation also means that the digital animation industry is one of the areas having significant growth opportunity in the near future. This fact forces Korea to put its emphasis on digital animation.

Table 32. Size the Korean Animation Industry

	2000	2001	2002	2003
Market Sales	$159,000,000	$213,000,000	$179,000,000	$224,000,000
Export	$126,000,000	$121,000,000	$83,000,000	$76,000,000

Note. From *Animation saneob baekseo* [The white paper on the animation industry], KOCCA, 2004, Seoul: KOCCA. *Animation saneob baekseo* [The white paper on the animation industry], KOCCA, 2005, Seoul: KOCCA.

Table 32 shows the recent status of the Korean animation, that is the digital animation industry. As is already explained in Chapter 4, the amount of exports is decreasing whereas the market sales are increasing slowly, which means that the importance of the subcontract-based production that was the mainstay of the Korean animation industry in the past is shrinking.

Table 33. Number of Original and Subcontract Animations by Type

	2001		1st half of 2002	
	Original	Subcontract	Original	Subcontract
2D	49 (42.2%)	58 (56.9%)	70 (35.9%)	N/A
3D	13 (11.2%)	6 (5.8%)	42 (21.5%)	N/A
2D+3D	21 (18.1%)	18 (17.7%)	42 (21.5%)	N/A
Clay	4 (3.5%)	0 (0 %)	4 (2.1%)	N/A
Etc.	29 (25%)	20 (19.6%)	37 (19%)	N/A
Total	116 (100%)	102 (100%)	195 (100%)	N/A

Note. From 2002 *manwha saneob tonggye: Aenimeishyun saneob* [2002 cultural industry statistics: Animation industry], MCT, 2002, Seoul: MCT.

As in Table 33, the total number of original works in 2001 was 116 while subcontract animation was 102. In the first half of 2002, original works already exceeded the total original works of 2001 with 195. This infers that the digital process is connected to an increase in original works. One also needs to focus on original works made as 3D type in 2002. There were a total of 42 works, more than three times as many as animation made in 2001. It is similar in the case of 2D+3D. The number of works was 21 in 2001, but the number rose to 42 in the first half of 2002 and showed a 200% increase while 2D showed an increase of 40.8%. In addition to this finding, the importance of 2D+3D and 3D also increased. 2D+3D (11.2%) and 3D (18.1%) took 29.3% of the whole production in 2001, but in the first half of 2002, the combined number was 43% (2D+3D: 21.5%, 3D:21.5%) This rapid increase in both 2D+3D and 3D types enables us to infer that the digital production process is prevalent throughout most of Korean animation.

According to a survey conducted by the computer graphic magazine, *Graphics Live*, the total market sales of 3D animation in 2001 was about $37.5 million, and the top four production companies (Digital Dream Studio, Big Film, Cinepix, and FX Digital) took 67% with about $21.7 million sales (Han, 2002).

Features of the Feature-Length Animation

It was about the late 1990s when digital techniques were coming into prominence in Korea, but producing digital animation was difficult because of the enormous amount of initial investment. Digital animation basically requires a large-scale financial investment for setting up production systems at the initial stage. Unlike making cel animation, the infrastructure to produce digital animation requires different kinds of production systems, such as highly-skilled computer animators, computer servers of huge

capacity, and facilities networking the whole up-to-date computers. About 1997 and 1998, some companies such as Seoul Movie, Sun Woo, etc. daringly introduced expensive production systems. Since then, digitalization of animation accelerated (Lee, S. B., 2001, p. 143).

The first animation using computer graphics was *Blue Seagull* (1994), but the animation that was fully digitalized was *Steelforce* (1999). When *Steelforce* was in production, several companies and organizations provided $25,000 in the form of materials and technical support. Even though this animation turned out to be a failure at the box office, it is recognized as the first fully digitalized 3D animation in Korea.

Table 34 presents feature-length digital animation that was in production in 2004 while Table 35 lists digital animation that is already available to the public.

Table 34. Feature-Length Digital Animation in Production Process, 2004

2D+3D	15
3D	15
Total	30

Table 34 is based on a list showing animation that is in production as of 2004, but digital animation that is in the planning state is excluded from the list. As of 2004, 15 works as 2D+3D and 15 works as 3D were in production. Considering that about 9 digital animations in feature-length format were released in the last five years (see Table 35), that 30 works are currently in process means that digital animation production is increasing rapidly.

Table 35 lists feature-length digital animation that was either released at theaters or completed in production process. Six out of the nine works were made as 3D type. The global success of US feature-length 3D animation surely has influenced the Korean

digital animation industry. But, animation in production tells a slightly different story. Rather than using only 3D type animation, the 2D digital type is also chosen as a feature-length format. That is, several production companies are trying to take advantage of techniques and experiences of cel animation rather than discarding these practices that have been accumulated over a long time.

Table 35. Completed Feature-Length Animation, 1999-2004

Title	Type	Time (min.)	Production company
Ark (2002)	3D	90	Digital Dream Studios
Elysium (2003)	3D	75	Big Film
Mateo (2004)	3D	80	Dong Woo
My Beautiful Girl, Mari (2002)	2D Digital	80	Siz Entertaiment
Oseam (2003)	2D Digital	70	Mago21
Run=Dim (2001)	3D	85	Digital Dream Studios / Japan
Steelforce (1999)	3D	90	B29Enterprise / SBS
The King (2001)	2D+3D	75	Toonipark / USA
Wonderful Days (2003)	Multi	90	Tinhouse

Some digital animation has several characteristics that need to be considered individually. There are two digital animations, *Wonderful Days* and *Elysium*, which are worthy of attention. The first point of concern is the size of the production cost. Over a seven-year production period, *Wonderful Days* consumed about $10.5 million. This cost is low when compared with the cost of most US feature-length digital animation.[13] But, considering that the Korean feature film *Resurrection of the Little Match Girl* (2002), which recorded the highest production cost of all time in 2002, spent about $9.17 million, the production cost of *Wonderful Days* was indeed a huge amount of money in Korea.

S. H. Hong confirms that the higher production cost is needed:

[13] According to The Numbers, the average production cost of 17 US digital animations that released from 1995 till 2004 was about $78,500,000.

> From now on, it, at least, needs to spend more than $10 million for making digital animation in a feature-length format. Considering the know-how that I accumulated through making *Wonderful Days*, spending $11 million for *Egg-cola* is not an exaggeration. Once you decide to produce digital animation in a feature-length format, you should think of spending more than $10 million at a minimum. If any animation does not use this amount of money, that animation has definitely some problems (personal communication, October 13, 2005).

Elysium is unique in that the first release of *Elysium* was not in Korea but in Russia. For the first time in Korean animation history, people other than Koreans watched a Korean-made animation first. Russians who viewed *Elysium* in 2002 were approximately 200,000 in number, and some Internet users were unsparing in their praise at the Russian IMDB[14] (Yim, 2002). There are two reasons why Big Film attempted this debut. First of all, through a release at an outside location, the company could carefully assess the audience reactions and prepare for more promotion strategies in advance. Second, by opening at a foreign market, it could reduce the burden of huge production costs and spread the risk of business failure. *Elysium* is now recognized as the first Asian 3D animation having been released in the world market (Kim, J. B., 2002c).

Mateo is an important animation in that it is the first work created by a production company and a support organization together. Dong Woo and Gangwon Information & Multimedia Corporation (GIMC) shared the entire production process. According to I. Yu (2005), more than 60% of the main production process was completed in Chuncheon. In particular, it was also the first time for a local organization to participate in the distribution process. I. Yu says that even though the distribution by GIMC was limited to Gangwon province, GIMC took full responsibility of Gangwon province (personal communication, October 12, 2005).

[14] It was made and managed by the famous movie Website, the IMDB.

Although feature-length animation contains many unique features and holds a crucial position in the Korean animation history, the box office record in Korea has been disastrous. As shown in Table 36, only six digitally-made works were released between 2001 and 2003. This result is, of course, much greater when compared with records of the early 1990s when less than one animation per year was available to the public.

Table 36. Number of Feature-Length Digital Animations Released at Theaters

	2001	2002	2003
Number of digital animation	2	1	3

Table 37. Size of Audiences

Title	Year	Attendees
The King	2001	5,800
Run=Dim	2001	22,600
My Beautiful Girl, Mari	2002	50,900
Wonderful Days	2003	140,080
Elysium	2003	1,400
Oseam	2003	25,574

Note. From *Animation saneob baekseo* [The white paper on the animation industry], KOCCA, 2005, Seoul: KOCCA.

The number of audience members who watched these Korean digital works also shows low results. As is shown in Table 37, six digitally made animations had only 246,354 total viewers. On the average, only 41,059 people watched one Korean digital animation at theaters. *Wonderful Days* is the only one that has been seen by more than 100,000 people. In the case of *Elysium*, because of the poor promotion by the distribution company and the one-week theatrical release, only 1,400 audience members were at the theaters.[15]

[15] About this poor result, Dirctor J. W. Kwon says that "*Elysium* was open only one week at one theater. In particular, it was even available only before noon and nobody knew Elysium was released because the

S. H. Hong says the most significant reason for the failures is the attitude of producers:

> As a matter of fact, it is our fault about the terrible box office results. I mean, producers like me released animation works whose qualities were below par. Most works focused only on visual images, and most producers spent too much money on visualizing only what they had in their minds. Producers have to be responsible for this failure (personal communication, October 13, 2005).

But, in spite of the poor results at the box office, Hong emphasizes that Korea needs to keep producing and to take unique approaches in its feature-length animation. He mentions two reasons why Korea should continue to produce digital animation:

> One is making animation which is getting competitive from other neighboring countries such as China and Japan. Both China and Japan produce lots of animation with low production costs because they have their own huge markets. The other is that the game industry has won digital technicians over to its own side because the game industry is currently making bigger profits. Using the money that game companies have earned through the success of some game software, they keep lots of skilled technicians even though they sometimes fail in some businesses. We can't ask those technicians to move to the animation production area until we show that making digital animation is also profitable (personal communication, October 13, 2005).

In addition, he mentions the importance that only feature-length animation possesses. Because of some invisible effects, Korea needs to keep producing feature-length animation:

> It is necessary for feature-length animation to produce a success. Let's take a look at the case of *Wonderful Days*. What *Wonderful Days* achieved financially was even too small to offset the promotion cost. But one thing that is very important is that everybody knows about *Wonderful Days*. That is, regardless of its financial failure, people remember that animation, *Wonderful Days*, which is totally different from the case of made-for-television animation. Making one million dollars from feature-length animation means that there are more effects that are not seen externally. Think about the battlefield.... The effect of one grenade is much more than millions of rifles. Of course, it would be better to shoot off more rifles to kill more enemies and one shot of grenade can kill only a couple of enemies. But, the sound of the explosion by just one grenade scares a large number of enemies. That is the difference between feature-length format and made-for-television format (personal communication, October 13, 2005).

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distribution company did not pay attention to promote *Elysium*." (personal communication, October 13, 2005)

Because of these reasons and the importance of the feature-length format, Hong maintains that Korea should not stop producing feature-length digital animation.

Features of Made-For-Television Animation

The total number of digital animation productions for television broadcasting is much larger than that of feature-length works. It is mainly because most made-for-television digital animation negotiates broadcasting contracts before or in the middle of the production process. As consumption—broadcasting, so to speak—is guaranteed at minimum and this guarantee can reduce the risk of business failure in advance, production companies prefer to produce made-for-television format.

Additionally, television is preferred by Korean people as the medium for watching animation. According to a survey conducted by KOCCA, television was chosen most often as the way to view animation (19.2% of the audience), followed by theaters (14.6%), VCR (12.9%), Internet (11.9%), cable channels (11.7%), and satellite channels (2.9%) ("Enimeishyun," 2003, p. 67). This means that broadcasting through major networks is the best way to secure the highest earning rate.

The made-for-television animation does not designate any specific age groups as its main target, which is different from the feature-length format. Whereas the feature-length format, on the whole, does have a specific age group target—for instance, *Wonderful Days* aims at males younger and older than twenty-years-old—the made-for-television format tries to be available for the total audience. These distinct audience targets enable production companies to deal with several different works at the same time. According to the production process list made by KAPA (2004), Digiart is producing one feature-length animation and one made-for-television animation simultaneously. Caf

Production is involved with three works all at once. In particular, Wild Ox is operating a total of four works (three for theaters and one for broadcasting) altogether.

Table 38. Completed Made-For-Television Digital Animation, 1999-2004

Title	Type	Time x Episode	Production Company	Co-Work
Adventure of Patapata Airship (2002)	2D+3D	30x26	Coco Enterprise	Japan
Bastof Lemon (2001)	2D+3D	30x26	Dong Woo Animation	
Boongaboo (1999)	3D	30x26	DR-FACE Digital Film Production	-
Bumper King Zapper (2004)	3D	30x26	FX Digital / SBS / Sonokong / Daiwon C&A Holdings	-
Cubix (2001)	3D	30x26	Cinepix	USA / Japan
Dr. Kangdagoo (2000)	3D	3x220	OCON	-
Dr. Nazallan (1999)	3D	4x350	OCON	-
Ducky the Perky (2001)	3D	5x24	Naray Digital Entertainment	-
Fantasy Village Topo Topo (2000)	3D	30x26	FX Digital	-
Frogertz (2000)	3D	30x13	Digital Odyssey	-
Geisters (2001)	2D+3D	30x26	Frame Entertainment	Japan
Haero & Toremy (2001)	2D+3D	30x26	Hanshin	Japan
Hey Yo Yorang (2003)	2D+3D	30x26	Seoul Movie / KBS	-
Jang Bo Go, Legend of Blue(2002)	2D+3D	30x26	Seoul Movie / KBS	-
Kkoma Chinghu Minu (2000)	3D	25x13	Chang Kang Maina	-
Hocus Pocus! Story Pouch (1997)	2D+3D	12x15	Anicom Production	-
Lexa I (2001)	3D	30x26	Dreampictures21	-
Lexa II (2004)	3D	25x26	Dreampictures21	-
My Dinga (2001)	3D	1x33	Iconix Entertainment / Hanaro Telecom / DR-FACE Digital Film Production	North Korea
My Friends Peekappo (1999)	3D	20x13	FX Digital	-
Netibee (2004)	3D	22x26	SOME Entermedia	China
Penning, The Tropical Penguin (2003)	3D	24x26	AnCharac Entertainment / Digital Dream Studios	-
Pororo, The Little Penguin (2003)	3D	5x52	Iconix Entertainment / Hanaro Telecom / OCON / EBS	North Korea
Robot Soccer (2002)	3D	12x26	Kims Anicomm	-
Run=Dim (2001)	3D	30x13	Digital Dream Studios	Japan
Space Hip Hop Duck (2002)	3D	22x26	Sun Woo Entertainment / KBS	-
Tangoo & Ullashong (2001)	2D+3D	30x26	Seoul Movie	-
Thumb Bear Kkomzi (2001)	3D	5x52	FX Digital / Sonokong / KBS	-
Tumoya Island (2004)	3D	10x8	Rainbus Studio	-

The animation that reached another record in the Korean animation history is *Cubix* since its first advance into the US network market. In the fall of 2001, Kids WB,

which is the children's program time period on the WB channel, broadcast *Cubix* every Saturday morning. *Cubix* was exported at a cost of a $3.1 million contract (Heo, H. J., 2003). Owing much to its success in the US, *Cubix* also was able to make contracts with other countries such as the UK, France, Italy, and Brazil (Kim, J. B., 2002a, and 2002c).

Table 38 lists made-for-television digital works that were either completed or broadcast through media. Among the total 29 works, the 3D type comprises twenty one and 2D+3D type, eight, which means, like feature-length animation, 3D is overwhelmingly preferred for making made-for-television animation. This trend is also found in Table 39 that shows the status of animation in the production process. Almost half of the total made-for-television animation is produced as 3D type. This tendency results from the fact that the nature of production companies is a transition period. That is, newly appeared companies are mostly mid-size with a focus on creating original animation with computer graphic techniques.

Table 39. Made-For-Television Digital Animation in Production Process, 2004

2D+3D	21
3D	41
Total	62

New Features Observed in Digital Animation

The introduction of computer and network technologies in making animation not only changes the production process, but also results in several characteristics that have not been seen in the past. These characteristics are (1) the change in the nature of production companies, (2) the conversion from subcontract-oriented animation to creative-oriented original works, and (3) the increase of co-production.

Changes in the Nature of Production Companies

One of the significant characteristics caused from the introduction of the digital process in producing animation is that the nature of production companies has changed. To put it more precisely, newly appeared production companies differ from existing production companies.

The subcontract-based production that has continued as the mainstay of the Korean animation industry decreased from the late 1990s. Around this time, digital production process appeared and new companies led this change. They were mostly mid-sized companies that had focused on making digital images.

These new production companies are venture companies that start their businesses with graphic technologies and already have a complete suite of digital graphic systems that are exclusively used for Flash or 3D type of animation. Most of these companies have existed previously before taking part in animation businesses. They produced commercials, PR images, and broadcasting logos using their graphic techniques as well as created special effects for movies. The fact that 3D type was more than 2D+3D from the beginning and that the Flash type of animation increased rapidly from the early 21st century is relevant to the appearance of these companies. This point is similarly underscored by Choi, J. I. (2004) who analyzes the changes of the production system in the late 20th century (p. 62). In addition, these companies earmark revenue from these works for their animation projects.

What J. W. Kwon says confirms this point:

> Before starting production, we have constantly accumulated our sales profits made from commercials and other production services. This saved money was invested in our animation work,

Elysium. During producing *Elysium*, other teams in the company continued to produce other works for the purpose of making money (personal communication, October 13, 2005).

Meanwhile, technical developments also were achieved before and after the 21st century. In the late 20th century, there were still some technical problems. The appearance of full-sized digital servers and upgraded computers, however, enabled production staffs to call work files from and post them to company network servers in order to share and use them with other staff members wherever they were (Yu, 2001, p. 44). Thus this technical progress has acted as a crucial factor to ensure that the international co-production of digital animation is carried out more easily.

Large-size production companies that have managed their businesses primarily with subcontracts also needed to follow the new trend and tried to convert their production systems into digitally equipped systems. They digitalized some parts of cel animation production processes such as inking and coloring processes. In this way, the 2D digital animation production process was set up. Yu (2001) emphasizes this point, but insists that this partial change in the cel animation process cannot be considered as real digitalization. He asserts that making digital animation is primarily led by the mid-size venture companies. In order to support this point, he provides evidence that mid-size companies, whose natures are more venture-oriented, own several expensive pieces of equipment such as 3D software and work stations than do large-size production companies (pp. 46-47). Rather, he contends that switching from the existing cel animation production system to a digital process is much harder and is a heavy burden to companies that focus on making cel animation (p. 51).

Tin House of *Wonderful Days*, Big Film of *Elysium*, Independence which participated in making *Wonderful Days* and is currently producing *Egg-cola*, and Cinepix that produced *Cubix*, are all cases in point. These companies started their businesses as studios that make diverse computer graphic images and rose to the status of important companies that produce digital animation.

The second factor that demonstrates a change in the nature of production companies is that more producers or directors concurrently hold CEO (Chief Executive Officer) positions. Tin House, Big Film, Cinepix, and Independence are again cases in point. In particular, Independence is managed by two CEOs and each CEO is in charge of producing different animation.[16] This phenomenon of holding both director and CEO positions is, however, not seen for all digital animation production companies. More importantly, this dual position has never been observed at existing cel animation-oriented companies.

These director/CEOs, who as engineers founded their companies and dealt with the whole process of making digital graphic images, know every detail of the production process and understand not only what equipment and labor are required, but also business management as well. Furthermore, since they have participated in production from the planning stages, they recognize the whole production process from pre-production to post-production. Without depending on subcontracts, they are dedicated to creative works and foreign services that have enabled them to make up their own production pipeline. Therefore, it is the most efficient way for producers or directors to hold CEO positions in

[16] One is producing *Treerobo*, and the other takes charge of *Egg-cola*.

making animation as well as in managing companies. Lee, D. R. (2004) confirms this trend through his analysis of the Big Film case (p. 70).

Table 40. Natures of Cel and Digital Animation Production Companies

	Cel Animation Companies	Digital Animation Companies
Company Size	Either small or large size	Mid-size
Production Style	Labor-incentive style	Technology-incentive style
Production Type	Subcontract works production	Original works production
Management	Directors and CEOs are separate	Directors and CEOs are same

Table 40 compares the nature of existing cel animation-oriented companies with that of the new digital animation-oriented companies. The former is either usually so small or so big in company size and has done primarily subcontract-based production on the basis of a labor-intensive production style. The latter, by contrast, appeared with new digital production equipment, and is mostly mid-sized with a focus on producing original works. In addition, several companies are managed by people who take both director and CEO positions. In conclusion, it can be said that these digital animation-oriented companies are mostly venture companies. It is also pointed out by Park, S. H. (2002), who presents several facts in support of them as venture businesses: the small size and technology-incentive nature of their business, the quality of their products rather than their price, and the high value-added but highly risky business (p. 21).

Conversion to the Original Work Production System

The second characteristic associated with digitalization is its conversion from a subcontract-based system to an original work production system. As mentioned in the discussion of the first characteristic, the mid-size venture companies that started

animation businesses with their computer graphic knowledge focus more on creating original animation. This means that the whole process of animation production (i.e., from pre-production to post-production) is done by companies. In the past, when animation was made on the basis of subcontract orders, only the main production component that included drawing, inking, painting and so on was done in Korea.

According to the production process list made by KAPA (2004), animation that is either in production or in planning comprises a total of 274 and is made by 135 production companies as of 2004. The fact that this large amount of original animation is in progress means that, at least, active production businesses are stimulated by the appearance of new digital animation production companies.

Table 41. Process Status of Digital Animation Production, 2004

Animation in Planning Stage (Total: 79)			Animation in Main Production Stage (Total: 185)		
Feature-length (18)	2D	3	Feature-length (33)	2D	3
	2D+3D	7		2D+3D	15
	3D	5		3D	15
	Etc*	3		Etc*	X
Made-for-television (45)	2D	12	Made-for-television (127)	2D	42
	2D+3D	11		2D+3D	21
	3D	16		3D	41
	Etc*	6		Etc*	23
OVA (6)	2D	1	OVA (6)	2D	X
	2D+3D	1		2D+3D	1
	3D	2		3D	4
	Etc*	2		Etc*	1
Etc** (10)	2D	X	Etc** (19)	2D	6
	2D+3D	3		2D+3D	1
	3D	4		3D	7
	Etc*	3		Etc*	5

Note. * This includes clay, puppet, stop and uncertain type of animation. ** This includes uncertain format, mobile format, and so on.

Table 41 shows the status of the production process, but 10 works from the whole 274 works are excluded because the status of these 10 works is not clearly reported. Thus, in total, 79 animations are at the planning stage while 185 works are currently in the main production process.

Among works at the planning stage, feature-length animation is 18, made-for-television animation 45, OVA (Original Video Animation) 6, and others are 10. Made-for-television format is therefore mostly in process. In the case of being at the main production stage, feature-length comprises 33, made-for-television 127, OVA 6, and other 19. These findings also show that the made-for-television format is being produced in the greatest numbers. In total, made-for-television is the most numerous at 172 (45+127), followed by feature-length 51 (18+33), OVA 12 (6+6), and others at 29 (10+19).

If the process is examined by the type of animation, 2D comprises 16 of the productions at the planning stage; 2D+3D, 22; 3D, 27, and others, 14, while a larger number of 3D are in the planning phase. In the case of the main production stage, 2D is 51; 2D+3D, 38; 3D, 67; and others, 29. 3D is also seen at higher levels at this stage as well. That is, a total for 3D is 94; 2D, 67; 2D+3D, 60, and others, 43. Thus, overall, 3D records the largest amount of animation in process.

For the made-for-television format, the findings suggest that the 3D type is being made the most extensively (16) at the planning phase while the 2D type of made-for-television format (42) is produced the most at the main production stage. However, almost the same amount of animation is made as the 3D type of made-for-television

format (41). In conclusion, the 3D type of made-for-animation format is preferred in terms of original works.

One more finding that needs to be addressed is that most digital animation companies think of original works as their only main target in the future. As J. K. Kim and S. H. Hong say, most producers and even some policy managers regard the current situation as being in a transition period in which there is an escape from subcontracts and a movement toward original works (personal communications, October 7, 2005, October 13, 2005). Therefore, they mention that the box office failures of some digital animation released in the last five years should not be regarded negatively, and instead emphasize that making original works should be continued from now on. For example, even though *Elysium* witnessed a total failure in the domestic market, it is necessary to begin development on original work production, thus enabling financial success to take place within four or five years (Lee, D. R., 2004, p. 71). Therefore, a significant increase in original animation production can be clearly seen as a recent trend of digitalized animation.

The Increase of Co-Production

The third characteristic associated with digital animation was found to be an increase in co-productions with more diverse countries working (see Table 42). More than anything else, this trend has resulted from the fact that digital animation companies aim at world advancement and have adopted a progressive attitude toward the global market. In addition, their technological achievements are highly valued by other countries (Park, M. S., 2003, p. 16). These several factors emerge as factors associated with the co-production increase. When Korea was heavily dependent upon subcontract orders and

focused on the main production stage only, there was no need to produce animation with other countries in the name of co-production. But, a strong will toward achieving global advancement led digital animation companies to make more co-production contracts.

Table 42. Animation Made as Co-Production

Animation	Co-production country	Animation	Co-production country
Netibee	China	*Pororo, The Little Penguin*	North Korea
My Dinga	North Korea	*Cubix*	US, Japan
Geisters	Japan	*Run=Dim*	Japan
Odd Family	France	*Tumoya Friends*	Canada
Adventure of Patapata Airship	Japan	*Twin Princes*	US, India, Canada
Haero & Toremy	Japan	*Hey, Yo Yorang 2*	China
The King	US	*Audition*	Japan

The main reason why co-production has increased is that production companies can find more investors and secure foreign markets more easily. That is, reducing financial risks through securing diversified investors and markets is the main purpose. Furthermore, it is also possible to have opportunities to acquire up-to-date know-how from other countries. Park, J. S. (2003) points out that co-production would be increased because other countries also want more co-production contracts with the same objectives (p. 136).

In addition, the diversity of countries that work with Korea has increased. The US and Japan are still considered more often as countries with which to co-produce than are any other countries, but recently such countries as Canada, France and India are also regarded as co-production partners (Yu, 2004, p. 34; Kim, S. S., 2003b, p. 24). In

particular, co-production with North Korea was achieved for the first time.[17] Hanaro Telecom, Iconix Entertainment, EBS and Face of South Korea and Samchunri of North Korea joined together and completed *My Dinga* in 2001. Joint companies on each side were allotted tasks. Each side contributed its relative strength: South Korean companies dealt with managing production costs and planning characters while the North Korean company that had less business experience took on the job of main production. *Pororo, The Little Penguin* (2002), is another work under the co-production contract.

Meanwhile, SOME Entermedia ventured into a co-production contract with CCTV, the largest broadcasting company in China. In order to make *Netibee*, CCTV took the main production part with 35% of the financial investment while SOME Entermedia was in charge of production planning and marketing. *Netibee* is evaluated as the bridgehead to enter the Chinese market and industry (Song, J. S., 2002; "Kuknae," 2003, p. 20).

Co-production also has materialized with Japan, the country which gave many subcontract orders to Korea in the past. In the case of *Run=Dim*, not only made-for-television but also feature-length formats were produced with Japan. Moreover, *Geisters*, which was based on the online game, was made with Japan. Japan was in charge of planning characters and the 2D part. *Adventure of Patapata Airship* is another case of co-production with Japan.

[17] Akom also co-produced *Empress Chung* with North Korea and *Empress Chung* was released in 2005. But, Nelson Shin, director of *Empress Chung*, said that it was unreasobale to recognize *Empress Chung* as digital animation when he declined to be interviewed for this research.

This transformation of production companies plays an important role in changing the nature of Korean animation industry, which previously had focused only on the main production process. Thus digital animation has led production companies to focus on maximizing profits with minimum cost on the basis of the One Source Multi Use (OSMU) strategy (see Figure 9).

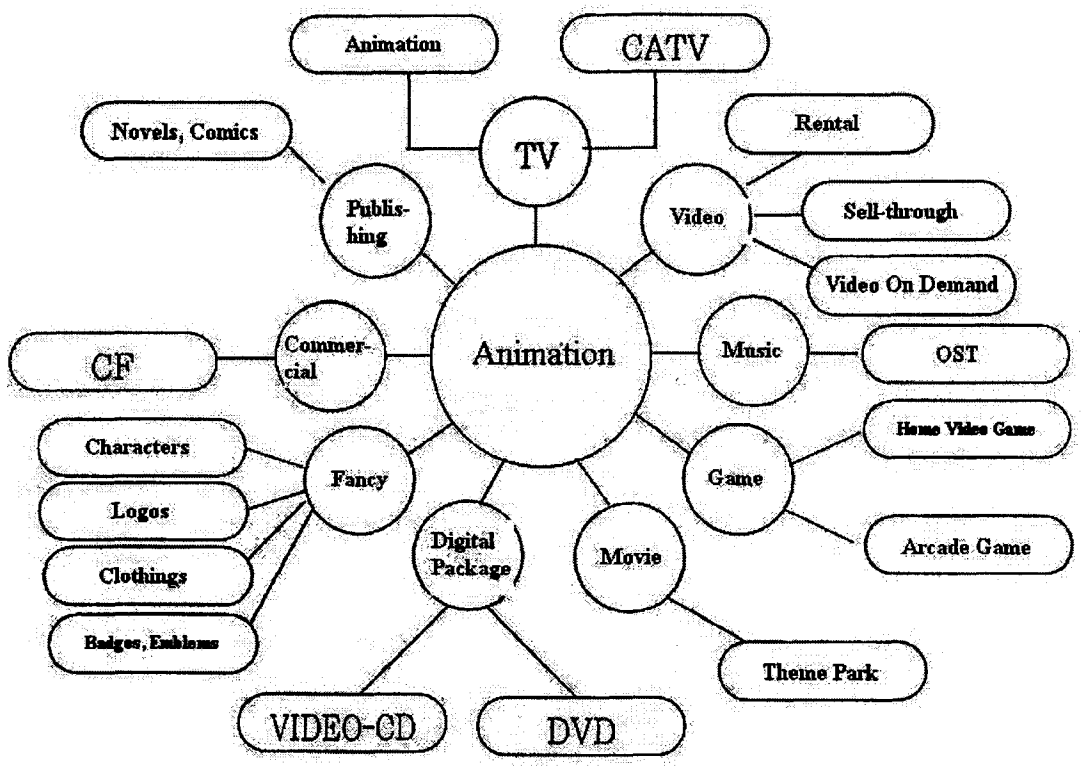

Figure 9. Animation usage on the basis of the OSMU strategy.
Note. From *Youngsan bininiseu segye* [Media software business], (p. 48), by H. S. Kim, 1998, Seoul: Moonjisa.

Some digital animations were and are being produced on the basis of this strategy. It therefore has become possible to utilize digital animation because most digital animations are original works for which production companies are able to undertake the total progression of phases that comprise the pre, main, and post production processes.

Original animation works already existed in the past. The 1970s saw the success of some original feature-length animation, the 1980s produced some original made-for-television works while some feature-length works were released in the 1990s. Yet, most works of the past were designed exclusively for media release, that is, either for television broadcasting or for theater release. They were not concerned with the diversification of their works except for one animation, *Dooly*, which started as a comic book in the early 1980s and opened in theaters in 1996. Since then, it has been distributed in a variety of forms such as commercials, music, and educational publishing (Kim, J. B., 2005, p. 17).

Digitally made animation that came out before and after 2000 started to study the *Dooly* case as well as examine cases of several US digital animations for which business diversification was successfully carried out. Business diversification in Korea, however, has not been multilaterally operated to the extent that is depicted in Figure 9. Most companies have dealt with some of these diverse areas first and then extended into more areas, having considered the OSMU strategy from the onset of their projects' planning stage.

For example, J. I. Choi discusses two points:

> Generally, animation is called the OSMU type of content. But, multi-use is possible only if the one source, that is, the original source, is attractive to consumers. So, we made up two strategic points and followed them exactly. The first point is that we definitely have to find and follow the preference of preschoolers, who are the main consumers of *Pororo, The Little Penguin*. This relates to the story part. The second point is about the characters of our animation. That is, all characters of *Pororo, The Little Penguin*, should be designed as products that can be commercialized. When we developed several designs, we carefully checked out whether those designs are cute enough to preschoolers and whether they are simple enough to be commercialized (personal communication, October 10, 2005).

This strategy of making characters as commercialized products is a case in point. Rather than diversifying its business too much from the beginning stage, the producers of *Pororo, The Little Penguin*, made efforts to follow through with the strong features that this animation possesses. This business diversification, observed from the strategies used by Korean digital animators, thus is arranged into two points (as Choi discusses above): the first is that animation companies pay attention to the development of animation characters and the second is that these companies put more focus on opening up foreign markets.

The Consolidation of Digital Animation Characters

It was the mid 1980s, through signing international agreements on copyrights, that Korea became interested in the importance of characters (Han, C. W., 2004, p. 77). Since then, Korea has acknowledged the importance of the economic value that animation characters could create and has focused on the financial success of the US and Japanese animation characters in Korea. Korea therefore came to recognize that the development of characters is the first step to advance their companies into other business areas such as toys, logos, and games.

In addition, Korean animation producers observed that Flash animation developed their characters and resulted in huge market sales. Such financial success, directly related to the expansion of the Korean character market, has stimulated production companies to consider developing characters more systematically through the use of the OSMU strategy.

Table 43 shows the size of the Korean character market. It was $34.3 billion in 2001 and grew to $40.07 billion, showing a 16.7% increase rate. The results of 2002 are

not considered here because, as already mentioned in Chapter 4, the year 2002 witnessed a special event, the World Cup football games in Korea. The market share of Korean characters also showed an increase. It was about 30% in 2001 but took about 38.3% of the market share in 2003. One thing to note here is that even though the market sales decreased in 2003 compared to 2002, the market share of Korean characters increased from about 35% to about 38.3%, thus suggesting Korean characters have been developed successfully enough to attract viewers' consistent attention. Moreover, these findings strongly point to the need for Korean digital animation to focus on the development of their characters.

Table 43. Korean Character Market

	2001	2002	2003
Market size	$3,433,000,000	$4,397,000,000	$4,007,000,000
Market share of Korean characters	$1,029,000,000 (30%)	$1,539,000,000 (35%)	$1,534,000,000 (38.3%)

Note. From *Animation kyungjehak 2004: Animation saneobeu daeanjeok bizeuniseu yunku* [Animation economy 2004: A study on the alternative business of the animation industry], (p. 83), by C. W. Han, 2004, Seoul: Communication Books.

Digital animations that have shown interest in developing characters are *Egg-cola*; *Pororo, The Little Penguin*; *Tumoya Friends*; and *Cubix*. Some of them such as *Pororo, The Little Penguin* and *Cubix* were released already and had a success in the character market. The common point of these animation projects is that they both considered character business from the pre-production stage. In other words, they designed characters first before they started to make story scripts. In the case of *Pororo, The Little Penguin*, J. I. Choi mentions that "as the main consumer was preschool children who still cannot read letters, the company really cared about making a character that can be

remembered for a long time with ease" (personal communication, October 10, 2005). Thus this market plan included an investment into publishing and toys, and consequently the company was successful.

The market value of the Pororo characters is highly valued in the foreign market. The UK admits that the Pororo characters have the potential to be successful in the European market to the same degree as famous European characters. Moreover, Penguin Publishing Company in the US also has determined that the Pororo characters can be successful in children's book as well as in character markets ("Woorihamkke," 2003, p. 37).

Cubix is another company that has developed its characters from the planning stage. Cho, Shin Hee, who is the CEO of Cinepix and the Director of *Cubix*, realized the importance of characters from the first and invested lots of time in creating characters. He says it took about six months to design his main robot characters (Cho, 2000, p. 16). He gave his priority to characters, a decision which differs from normal animation production procedure in which storylines are created first followed by the design of main characters and character images that reflect storylines. Like the Pororo case, *Cubix* also connected its characters to the marketing of toys and video games when this film was released in the US.

The importance of characters is also seen in other works. *Egg-cola*, which is now in production, has tried to make its characters simple so that they are remembered easily by their audience. In the case of *Robo Fighter*, Big Film also plans to commercialize all characters from the planning stage and to exert efforts to develop simple characters (Lee, D. R., 2004, p. 74).

Furthermore, *Odd Family*, well known as the first co-production with France, is also aggressive in diversifying business. *Odd Family* permitted the use of its main characters in commercials before its release (Kim, S. H., 2004). It also plans to promote *Odd Family* indirectly as well as to diversify business. In particular, the company contracted with multi-national brands such as Toshiba and showed main characters in more than 30 countries, thus enabling *Odd Family* to advance into foreign markets more easily (Park, H. J., 2004).

Wonderful Days, however, is a case that failed to market characters for commercialization:

> When I was making *Wonderful Days*, I made the original model of each character as a plastic model first, just like what you saw last year. I tried to find a company that would sell characters of *Wonderful Days* as plastic models, but no one wanted to do that. Some companies were on the list but they gave up soon; they didn't think characters of *Wonderful Days* were worthy to sell in the market.... And, characters in *Wonderful Days* are absolutely not of the cute type. Rather, they are the type for maniacs (Kwon, J. W., 2004, p. 176).

Kim, Moon Saeng, the Director of *Wonderful Days*, also considered the commercialization of mechanic characters such as motorbikes and airplanes, but could not release them into the market because all the characters were hard to commercialize. Yet, as is confirmed from the several cases reviewed above, the development and commercialization of characters is an essential feature that digital animation needs to address.

The Concentration on Global Sales

As a part of business diversification, Korean digital animation places much importance on global sales and has tried to extend the number of countries to which it exports. For instance, according to J. I. Choi, *Pororo, The Little Penguin*, was exported to

France, the UK, Italy, and the Scandinavian countries. Moreover, in the case of Asia, this work was exported to China, Japan, Taiwan, India, Indonesia, and the Philippines (personal communication, October 10, 2005).

Some production companies such as Big Film recognize the limits of the domestic market and place more focus on the foreign market. As a practical strategy, more companies try to make co-production contracts with foreign companies.

Wonderful Days and *Elysium* are cases in point. *Wonderful Days* made efforts to secure foreign sales during the production process by presenting its trailer films at several international markets and festivals. These efforts helped *Wonderful Days* not only to obtain some financial help from other countries, but also secured its release at US theaters for the first time in Korean animation history. In the case of *Elysium*, this film was released in Russia before its release in Korea. Big Film, which already expected it would be hard to be successful in Korea because of the limited market, released its film in Russia first and as a result obtained the support of about 200,000 Russian viewers. This strategy increased Big Film's draw in foreign markets. Both works, despite the passage of two years since their first release, are still in sales to foreign countries.

About the global release of *Wonderful Days*, the director says,

> Yes. A total of 12 countries are supposed to release the film. They are Japan, France, Spain, Germany, Italy, Turkey, Taiwan, and so on.... Presently, I am in the middle of writing a new script.... In the case of the funding, nothing is settled yet. But, France has demonstrated a big interest in that next animation and has already offered me a co-production deal and Japan is in negotiation about participating in the production of the next work (Kwon, J. W., 2004, p. 158)

Meanwhile, it is possible to infer the importance of foreign markets from what J. W. Kwon says:

> We spent about $3.75 million in production costs and about $1.67 million has been collected so far. We are still creating contracts for exportation. The most important thing is to export to the US and Japan and we are still looking for distributors for both countries. If contracts with both countries succeed, it would be just a matter of time to collect production costs.... Actually, it was not too difficult when we went into foreign markets except for the US and Japan.... Because *Elysium* was made at a surprisingly low production cost, which is just a drop in the bucket when compared to US digital animation; other countries were surprised to see this quality product with this low cost.... Up to now, France, Germany, Russia, Italy, Switzerland, and Greece are countries that import *Elysium*.... Incomes we made in the domestic market were extremely small. More than 95% of sales come from foreign markets (personal communication, October 13, 2005).

Because few countries can produce full 3D feature-length animation in the world, the possibility to make profits as well as to collect production costs through global sales is higher than in the domestic market. Several companies like Big Film pay more attention to foreign markets for this reason. Consequently, other production companies also make up for the loss through selling their animations in the foreign market.

Furthermore, foreign sales provide more opportunities for production companies to pursue. The benefit of global sales is to secure more occasions to make co-production contracts. As J. W. Kwon says, the experience to contact several foreign studios directly and to develop foreign distribution routes exclusively is another benefit of foreign market sales. This business plan also works as a promotion strategy to get the name of Big Film out into the world. Thanks to this experience and contacts, Big Film is able to undertake four additional production projects, which are full 3D format. Moreover, half of them are planned to be co-produced with foreign companies (personal communication, October 13, 2005).

The main reason why companies can enjoy these advantages is that there are still a few countries that have the capacity to produce digital animation, especially 3D animation. In the case of the feature-length format of 3D animation, no other countries

except the US have had financial success in this area. Therefore, emphasizing foreign sales can be one of the most important factors for business diversification.

As already mentioned, most digital animation projects do not operate business diversification to the degree that is depicted in Figure 9, mainly due to the fact that companies drive business diversification according to their current financial situation. As is pointed out by C. W. Han, such business diversification is possible only if companies secure enough capital in the initial stages of the production process (personal communication, October 17, 2005).

The Shortcomings of the One Source Multi Use Strategy

The strategy of OSMU has been highlighted as an effective method for the development of the digital animation industry. Its weakness, however, pointed out by academic researchers as well as by producers, lies with the reliance on one source. If the one source is not a good item, it is impossible to make a synergy effect through producing other products.

J. M. Lee insists that "the fatal weak point of the OSMU strategy is that it is totally useless unless the one source is good enough to capture the attention of an audience (or consumers) and market" (personal communication, October 26, 2005). C. W. Han also mentions this weak point in more details and strongly criticizes the extremely optimistic perspective of the OSMU strategy:

> One Source Multi Use has two fatal flaws. The first is that the one source should be a star with great popularity. What I mean is the OSMU strategy should be based on the star system. Once the source is successful in the market or attractive to consumers, this strategy can work properly. But, most people misunderstand that this is the strategy that can achieve success all the time.... The other problem is that this strategy certainly is accompanied by additional costs. What I realized through managing a company was a certain amount of expenses should be invested in every production process.... So, people in academic circles need to review this strategy carefully by all means. The OSMU strategy is not the one that everybody can handle. Particularly, in the case of a

> newly created source, applying this strategy is so risky (personal communication, October 17, 2005).

Thus, the scope of the OSMU strategy was overestimated when it was introduced to cultural industries and misunderstood as the concept that can be applied to every area in cultural industries including digital animation. Particularly, Han's second point, that the OSMU strategy requires additional costs, refutes existing thought that the OSMU can maximize value-added with a small amount of additional expense.

The opinion of B. M. Lee is similar to the above argument that OSMU cannot be used everywhere in cultural industries. He says that "the OSMU strategy is solely a tool to enhance the possibility of resuscitating an (animation) project. It is not a solution for every project, but is just one of the business models that can be utilized" (personal communication, October 24, 2005).

For this reason, some producers adopted this strategy optionally according to the production conditions. For example, S. H. Hong maintains that:

> Unlike other companies, we did not manage other businesses using *Egg-cola*. When we considered entering Hollywood, we checked out their preferences and realized people in Hollywood prefer the turnkey base system. That is, they wanted to handle every contract about related-business areas.... Of course, we also thought of creating items that could be used in game and theme park businesses, but did not reach on practical business contracts (personal communication, October 13, 2005).

This implies that adopting the OSMU strategy depends on the conditions that production companies face and it should be used on an optional basis.

It is important to note this weak point of the OSMU strategy that is related to the fact that the type of business diversification observed from Korean digital animation is developing only animation characters and emphasizing foreign sales. However, since only a few years have passed since OSMU's introduction in Korea and the Korean

animation industry is facing a transition period from a cel animation to a digital animation system, it is hard to undertake a detailed analysis of the problems connected with this strategy.

Co-Production: The Embodiment of Regionalization

The increase in co-production, which already has been mentioned as one of the characteristics associated with digital animation, should be studied separately because not only because it is beneficial to the production companies but also because it embodies regionalization. Through diversifying co-production partners, digital animation can be distributed throughout other countries more easily, share production information, and reflect cultural characteristics either in storylines or in characters.

There are several reasons why companies pay attention to co-production systems. First of all, it is possible to change the nature of an existing production system. Second, it is possible to diversify financial investors. Third, it is much easier to secure foreign sales. The most important benefit of co-production, however, is to provide opportunities for Korea to take charge of pre- and post-production processes, to leave the main production process to co-produced countries, and to supervise the whole production process.

In terms of countries to be chosen as partners, co-production can be largely divided into the Asian group and the non-Asian group. In the Asia, Japan, China, India, and North Korea are included. In the non-Asian group, the US, Canada, and France have made production contracts with Korea. Through co-production with Asian countries, Korea tried to experiment with both pre- and post-production tasks. Meanwhile, the main production process is normally given to Korea in the case of co-producing animation with

non-Asian countries. Yet, the important point is that Korea participates in some or the total parts of either pre- or post-production processes in general.

Co-Production with the Asian Group

With the digitalization of animation production, co-production with several Asian countries is also accelerated, and the number of works is increasing conspicuously. This growth is possible because Korea is establishing a new production structure that is different from the time of cel animation-oriented production under subcontracts.

Table 44 lists works made with Asian countries. Two works have been undertaken each with China, and North Korea, and six works were made with Japan. Most co-production is still done with Japan, but China and North Korea recently have surfaced as new partners.

Table 44. Co-Production with Asian Countries, 2004

Country	Animation	Year	Type	Company	Production Status
India	*Twin Princes*	X	3D	Toonz Animation Ltd.	Planning
China	*Netibee*	2004	3D	CCTV	Completed
	Hey, Yo Yorang 2	X	2D Digital	N/A	Planning
North Korea	*My Dinga*	2001	3D	Samchunri	Completed
	Pororo, The Little Penguin	2003	3D	Samchunri	Completed
Japan	*Geisters*	2001	2D+3D	PLUM	Completed
	Adventure of Patapata Airship	2002	2D+3D	TMS, WOWOW	Completed
	Run=Dim	2001	3D	Idea Factory	Completed
	Audition	X	2D Digital	Imageroom Zero	Producing
	Cubix	2001	3D	JR Agency	Completed
	Haero & Toremy	2001	2D+3D	PNB	Completed

North Korea, a country that has hardly been open to the outside world in terms of its digital techniques, became known at the time when North and South Korea started to

have an economic and cultural exchange in the late 20th century. North Korea already produced some parts of movies with its own computer graphic technique in 1998. It produced a 3D animation a few years later and its techniques became highly valued (Bae, 2004, p. 106). In addition, because of its low labor costs, highly educated animators as well as its special relationship with South Korea, North Korea gained the spotlight as a new partner for co-production. Although Samchunri appears to be the company that makes contracts officially, the production process is carried out for the most part by 4.26 Children's Movie Studio (Lee and Lee, 2004; Kim, H. J., 2004). Several parts of the main production were given to North Korea, while South Korea mostly took charge of the whole process of supervision including planning, foreign distribution, and marketing.

To make the process more efficient, several Korean companies participated in co-production and a division of the tasks. In the case of *Pororo, The Little Penguin*, Hanaro Telecom took responsibility for the finance part, EBS was in charge of the domestic distribution, and Iconix and Ocon designed character and created storylines. The production process of *My Dinga* is similar to that of *Pororo, The Little Penguin*.

There were some difficulties and problems in this joint production, however, that were not found in co-production with other countries. J. I. Choi explains those problems in detail:

> It's certain that North Korea has potential in the 3D animation area. North Korea is ready to join with us. But, there's a problem. It is not a matter of technical difference but a matter of communication. South Korea wants to establish a win-win system through co-producing works, but North Korea has a different viewpoint. Whenever North Korea conducts some business with South Korea, it ignores something that people generally think as part of the business relationship. That is, business with South Korea is not a real business and North Korea wants South Korea do something more.... North Korea's system to manage business is totally different.... For example, if there's an order to be finished in a designated deadline, we normally follow that. In the case of incompletion, we have to receive a penalty. But, North Koreans do not think the same way. They do not care about deadlines or something like that. And, they don't care about additional

> corrections either. This kind of problem, I can say, comes from the limitations of a business viewpoint. Co-production with North Korea will be such a hard job unless these problems are solved in advance.... And, we cannot contact North Korea directly. Once we wanted to discuss with North Korea about production problems, there's no other way but to use fax. But, even the fax is not sent to North Korea directly. It is always sent to China because there's a branch office in China. That branch office connects both sides by fax. So, it's too uncomfortable, and this detour makes North Korea feel different from what South Korea wants.... When we started co-production projects, we visited North Korea once to attend the business orientation. That's all. After that, we, as I said already, have contacted North Korea only by fax (personal communication, October 10, 2005)

To continue the co-production relationship, both sides have made another attempt which has been to establish the Entrak and Minjok Network. In addition, an industrial complex in Gaesung will be used as the production studio for working together (Lee and Lee, 2004, pp. 23, 25, 26). As to the usage of the Gaesung industrial complex, J. I. Choi implies that it is a good alternative because South Korean people can supervise the production process directly (personal communication, October 10, 2005).

Increasing co-production with China, however, has a different purpose. While Korea is interested in the extensive Chinese market, China wants to gain knowledge about digital animation and to keep animation of major countries in check through co-producing animation with other countries (Kwon, K.Y., 2003, p. 24). When Korea and China co-produced *Netibee*, they shared the finance investment while Korea dealt with planning and marketing and China was in charge of the main production process. Moreover, they promoted business diversification in the character area (Kim, S. S., 2003a, p. 20).

Similarily in the case of North Korea, South Korea undertook another experiment for the purpose of maintaining the co-production relationship: the establishment of a collaboration foundation. Through the foundation, both countries attempted to share profits that came from the character and copyright businesses and to expand their

business scope using the high valued recognition of Korea movies and dramas. In particular, the conclusion of an MOU about information exchange and co-research can be seen as a link to strengthen the official connection between both countries (Kim, et al., 2001, pp. 35-36).

Korea undertook co-production with Japan for a different reason. Japan needed to solve the problem of a labor shortage caused from the rapid development of the game industry.[18] Many highly skilled laborers moved to the more profitable game industry.[19] So, Japan believed that a co-production with Korea would be one of the best strategies that Japan could choose. Korea, on the other hand, wanted to gain more know-how about both pre- and post-production. Consequentially, Korea dealt primarily with the main production process, but also participated in either pre- or post-production to a certain degree. Some have coined this relationship between Japan and Korea as "the strategic coalition" (Kim, et al., 2001, pp. 136-137).

Co-Production with the Non-Asian Group

Unlike co-production cases with Asian countries, the co-production with non-Asian countries generally focuses on acquiring pre- and post-production knowledge and experience as well as securing the markets of developed countries that possess such strong purchasing power. As seen in Table 45, there are a total of four digital animation works that either were already completed or are in progress. The number of works is smaller than the co-production projects with Asian countries. Nonetheless, it is worthwhile to consider Canada and France as new co-production partners.

[18] It was also pointed out by J. M. Lee (personal communication, October 26, 2005).
[19] It is also witnessed in Korea, as mentioned by S. H. Hong (personal communication, October 13, 2005).

Odd Family, the first co-production animation with France, is being produced by a newly established 3D graphic company that considered the foreign market from the beginning (Kim, S. S. 2003c, p. 23). France has invested 70% in *Odd Family*. SamG of Korea handles character design, original plans and the main production process while France deals with script, design, recording, and sound effects. It is an important co-production work because business diversification, including distribution in the European market, character business as well as the publishing business, will be done jointly. In addition, Korea and France are building up the online communication network. Through setting up the production pipeline by the Intranet, one side can check out the process of the other side whenever each side wants (Shin, S. J., 2004, p. 79). Thus, *Odd Family* is making maximum use of the well-developed IT technologies in addition to the digital graphic technologies.

Table 45. Co-Production with Non-Asian Countries, 2004

Country	Animation	Year	Type	Company	Production Status
France	*Odd Family*	X	3D	Timoon Animation	Producing
Canada	*Tumoya Friends*	X	3D	N/A	Producing
US	*Cubix*	2001	3D	4Kids Entertainment	Completed
	The King	2001	2D+3D	N/A	Completed

Co-production that utilizes the strenght of IT technologies is also observed in the case of *Tumoya Friends*, being co-produced with Canada. The company of Rainbus invented its own pipeline management program for the purpose of saving time and money through sharing the production process in real time communication. The efficiency of this program has received high praise, and some co-production projects have adopted this program (Lee, D. R. 2004, p. 78).

The other feature of *Tumoya Friends* is the script, which always has been the drawback of Korean animation. In this case, the script is being developed jointly with Canada. Through its own process management program, scriptwriters of both sides are working together, partially reducing the risk of cultural problems when *Tumoya Friends* is released in each country.

Among cases of co-production with the US, *Cubix* is an important example. The process of promoting investment and deciding distribution plans is systematically carried out by three countries. At first, two Korean companies (Cinepix and Daiwon C&A Holdings) started the planning of *Cubix*, and then the US decided to participate. Subsequent to this three-way co-production, a Japanese company as well worked with two countries (Kim, et al., 2001, p. 146). What distinguishes the current collaboration from the Japanese case is that the whole process is led mainly by one country—in this case Korea—and thus the profit distribution rate is assigned differently to each country by region. *Cubix* is recognized as the first case in which more than two countries have collaborated together with differentiated options.

Establishing Regionalization and Composing a Global Network

As explained above, co-production significantly increased with the development of digital animation, resulting in some important implications. First of all, co-production contracts with Asian countries have given Korea opportunities for direct experience with both pre- and post-production. In the case of co-production contracts with non-Asian countries, Korea has been able to acquire more detailed knowledge about pre- and post-production through overseeing the main production process. The benefits of co-production thus vary by region, and can be considered as strategies differentiated by

subject. As Park, M. S. (2003) suggests, digital animation, especially 3D animation, is accepted as the cultural product that has greatest possibility for survival in the competitive global market (p. 28). Therefore, 3D animation inevitably will require co-production in order to supply production costs as well as secure more markets to sell. Based on this necessity, the creation of more co-production scenarios that can take advantage of the strengths that each region possesses can be considered as the embodiment of regionalization.

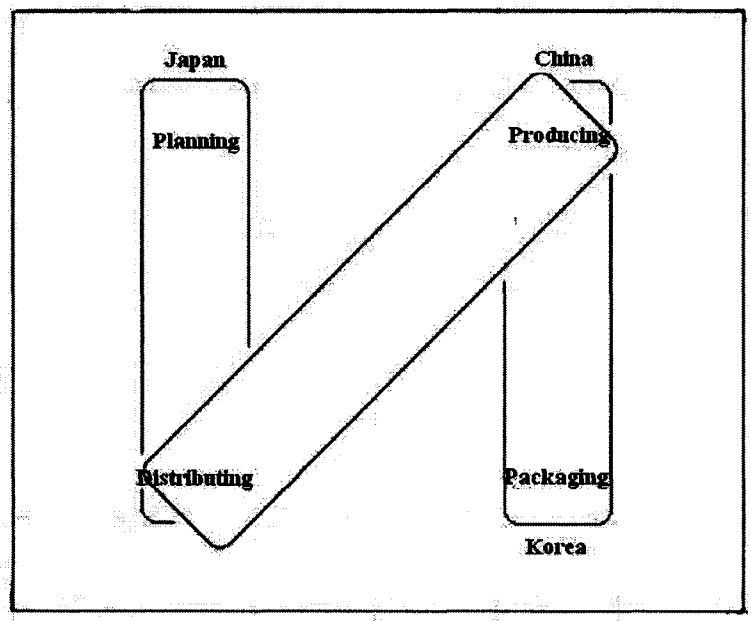

Figure 10. Strong points of three Asian countries in animation production before changing.[20]

J. M. Lee shared his opinion about building this co-production system (personal communication, October 26, 2005). First of all, globalization of digital animation production should precede regionalization at the Asian level, especially in terms of Korea, China, and Japan. A similar point was already mentioned by others such as KCTPI (1997, 2002) and KOCCA (2003a), but his point is more developed. He says that both strengths

[20] Lee, Jeong Min showed these two figures (Figure 10 and 11) during interview.

and weaknesses of each country can complement each other flawlessly. When the production process is categorized into four steps—planning, producing, packaging, and distributing—three countries currently show the relationship demonstrated in Figure 10. First, Korea is good at producing and packaging.[21] Second, China is strong at labor and markets, that is, producing and distributing. And third, Japan is an expert in planning and distributing. Therefore, it is possible for three countries to take partial charge of the production process.

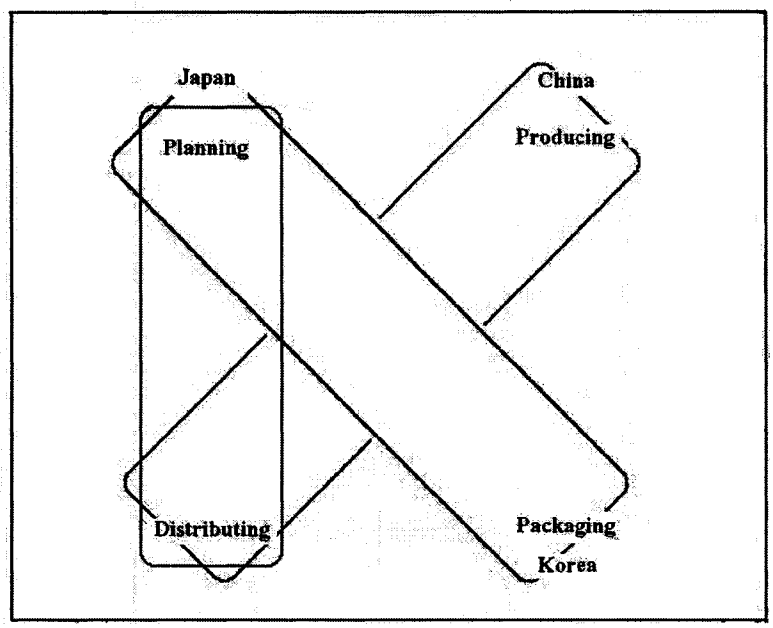

Figure 11. Strong points of three Asian countries in animation production after changing.

The benefits described above by Lee strongly suggest the need to increase co-production. For Korea in particular, it is necessary to enlarge the scope of the production process dealing with not only producing and packaging, but also planning. It is thus with co-production that Korea can enjoy the synergy effect. Lee, however, adds that since

[21] Packaging is the concept coming out with the appearance of digital animation and includes the process of editing, converting and so on.

China is focusing on producing, Korea needs to transfer its interest from producing to planning. This change would make it much easier for each country to meet the needs of the other countries in this overlapping of responsibilities (see Figure 11).

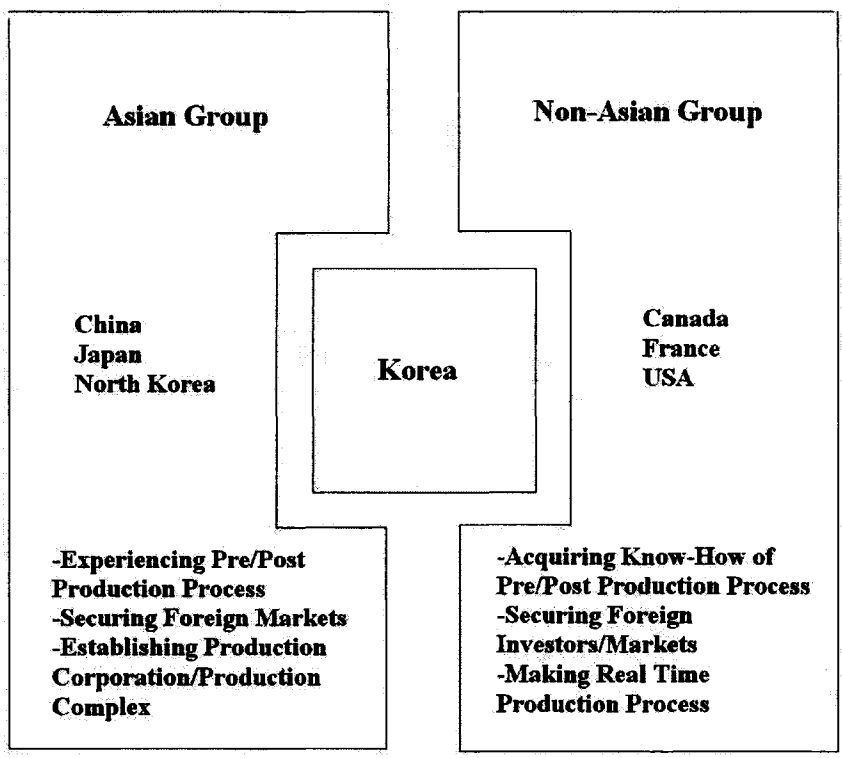

Figure 12. Establishment of regionalization through the co-production system.

In the meantime, co-production with non-Asian countries is heading toward Korea's acquisition of more expertise about planning and thus securing the certainty of being able to manage the distribution part. It is important to point out that Korea can take advantage of its well-developed IT technologies in acquiring information about the planning process. As mentioned above, several production companies such as Rainbus and Independence have developed and managed their own process management programs in order to raise the efficiency of the communication and production procedures. By enabling real time communication, companies not only can save production costs and

curtail the production period, but also can acquire knowledge that is necessary to create original digital animation. It is important to note that this regionalization with non-Asian countries is different from the regionalization that Korea is establishing with Asian countries. In other words, Korea is constructing a globalization of digital animation by building two separate regionalizations simultaneously (see Figure 12).

Through the regionalization with the Asian group, the Korean digital animation industry is seeking to experience the entire production process, secure foreign markets, and establish production corporations or production complexes. In the meantime, regionalization with the non-Asian group helps Korea to acquire the know-how of the pre- and post-production processes, ensure foreign investors and markets, and establish real time production pipeline.

Chapter Summary

Digitalized animation, which has been fostered and developed by several environmental factors, shows an increase in both feature-length and made-for-television formats. Moreover, digitalized animation has resulted in the proliferation of new features, which can be presented as the following three points. First of all, digital animation production companies show changes in their nature and focus on the creation of original works. Second, these companies have adopted a new strategy called One Source Multi Use (OSMU) and consequentially have pursued the diversification of business. Third, the co-production of digital animation with foreign companies has been significantly activated. In particular, this co-production system has resulted in regionalization beyond national borders (see Figure 13).

The most important characteristic of digital animation that arises in the conclusion of this chapter analysis is that Korean digital animation is on a quest to venture outside its borders. In other words, the three kinds of industrial characteristics imply that Korean digital animation seeks to become globalized. Therefore, digital animation requires a differentiated policy to support the globalization of Korean animation.

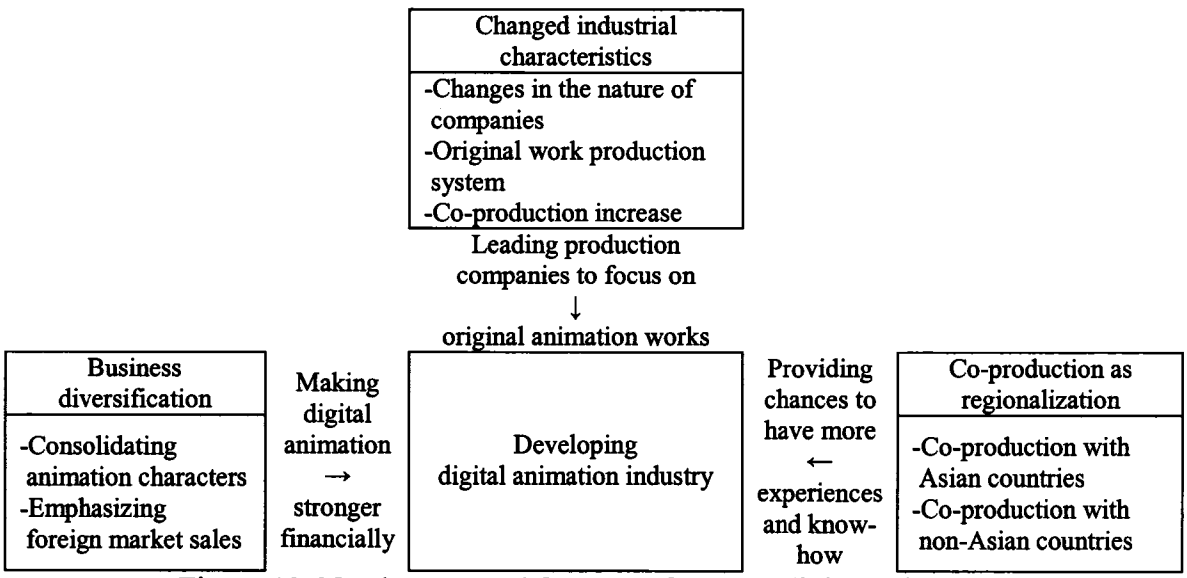

Figure 13. Newly appeared features of Korean digital animation.

CHAPTER 6

DIVERSIFIED SUPPORTING SYSTEMS

Chapter Introduction

Chapter 6 examines the current policy and supporting systems for Korean digital animation. The intent of this chapter is to determine the role of the nation-state in the operations of cultural industries and regionalization. Research questions for the analysis of these points are as follows:

2-a. Which government agencies are responsible for the policy implementation of digital animation?

2-b. What are the key support programs for digital animation?

2-c. How are support programs for the digital animation industry carried out?

The proposition for these research questions is that policy and supporting systems for digital animation are carried out by both national and local governments.

On the basis of these research questions and proposition, this chapter deals with three key analyses. First, agencies that operate supporting systems for digital animation are examined. Second, policy and supporting systems managed by both the national and local governments are analyzed. Third, this chapter examines regionalization by focusing on the cultural cluster of Chuncheon.

The National Government Policy

The decade of the 1990s in Korea witnessed the strengthening of international relations with the announcement of plans to globalize Korea, the heightened importance

of cultural industries, and the initiation of local autonomy. All of these societal factors finally led the Korean government to acknowledge the necessity to boost cultural industries for the sake of the national economy and of local finance. Digitalized animation is one of the cultural industries that has been designated as a promising area in which to achieve these goals.

For the most part, government support is divided based on who enforces policy: one is the national government and the other is local governments. Policy and supporting systems of the national government are more diversified because local governments still need to rely on the financial support from the national government even though local governments possess authority to manage their own support programs after the initiation of the local autonomy system.

The System of Government Support Posts

As is explained in Chapter 4, the paradigm shift on cultural policy from regulation to support led to a reevaluation of the importance of cultural industries and resulted in the establishment of diverse support programs for them. Animation that had been underdeveloped within cultural industries also was reevaluated and its potential came to be emphasized more than any other area among the cultural industries. This trend led more government ministries to demonstrate an interest in animation and, in turn, provide several support programs.

According to the data provided by Cho, et al. (1999), there are five government ministries that have policies relating to the animation industry: The Ministry of Culture & Tourism (MCT), the Ministry of Information & Communication (MIC), the Ministry of

Commerce, Industry & Energy (MOCIE), the Ministry of Foreign Affairs and Trade (MOFAT), and the Small and Medium Business Administration (SMBA) (see Table 46).

Table 46. Main Government Posts to Support the Animation Industry

Government posts	Main point of policy for the animation industry
Ministry of Culture & Tourism	Encouraging animation as a promising and value-added cultural industry
Ministry of Information & Communication	Supporting animation for accelerating content industry among software industry areas
Ministry of Commerce, Industry & Energy	Backing up animation for activating domestic manufacturing industry
Ministry of Foreign Affairs & Trade	Boosting animation as an up and coming industry to encourage exports
Small and Medium Business Administration	Helping animation to become one of up and coming venture business

Note. From *Jeongbo tongshin kisuleul tonghan enimeishyun saneob yuksung bangan* [The encouragement project for the animation industry via information technology], (p. 26), S. W. Cho, C. W. Han, E. Y. Han, S. M. Choi, & B. H. Kim, 1999, Seoul: KISDI.

Their purposes are basically the same in that all of these agencies purport to develop the animation industry, but the perspectives on the animation industry vary. MCT thinks of animation as a part of the cultural industries, MIC regards it as part of the content industry, MOCIE and MOFAT look at it as an industry sector within the whole Korean economy, and SMBA considers it as a venture industry. Because of these diverse viewpoints, the ministries do not cooperate with one another. In addition, except for MCT and MIC, other ministries—MOCIE, MOFAT, and SMBA—do not manage any support programs separately.

In addition to these ministries, there are two independent organizations: the Korean Broadcasting Commission (KBC) and the Seoul Animation Center. KBC's policy,

however, is limited to only the broadcasting deliberation part while Seoul Animation Center, which is funded by the Seoul Cultural Industry Foundation, focuses mainly on independent animation support, such as education plans and marketing. Therefore, MCT and MIC are most noteworthy here because both have similar viewpoints on cultural industries and because their affiliated organizations also demonstrate similar propensities.

Both MIC and MCT are similar in that they treat animation as content. Yet while MCT thinks of content as solely *cultural* content, MIC considers it as *digital* content. As is pointed out by Hyun (2003), this disparity arises from the fact that culture is recognized as content that has merged with information technologies through digitalization (p. 21). Consequently, it is apparent that both ministries deal with the same industry with different words.

Table 47. Key Points of MCT and MIC on Cultural Industries

Subject	Ministry of Culture & Tourism	Ministry of Information & Communication
Concept	Cultural content	Digital content
Background	Culture	IT
Law	Cultural Industry Promotion Act	Online Digital Content Industry Promotion Act
Affiliated organization	Korea Culture & Content Agency	Korea IT Industry Promotion Agency
Main area	Character, movies, broadcasting, animation, music, game, comics, etc.	DMB, HDTV, Internet, etc.
Main purpose	Activating local economy and developing cultural content	Establishing a ubiquitous society through information infrastructure
Fund	Cultural Industry Promotion Fund	Online Content Technology Promotion Fund
Industry	Cultural industry	Online digital content industry

These similar but slightly different viewpoints are compared in Table 47. MCT sees cultural industries on the basis of culture whereas MIC treats this area as information technology. This difference between the two ministries is related to practical areas. While MCT has the Cultural Industry Promotion Act as a legal foundation, MIC is based on Online Digital Content Industry Promotion Act. Similarly, each ministry has its own management fund. MCT is using the Cultural Industry Promotion Fund while MIC is managing the Online Content Technology Promotion Fund. As an umbrella organization that operates support programs, the Korea Culture and Content Agency (KOCCA) of MCT is contrasted to the Korea IT Industry Promotion Agency (KIPA) of MIC.

This differentiated treatment of cultural industries is also seen in the long-term vision of each ministry. Whereas MIC has a plan to invest $510 million on the basis of Cyber Korea 21 vision, MCT has allotted $712 million through the plan of Content Korea 21 (Hyun, 2003, pp. 22-23).

These similarities of both ministries are directly connected to their affiliated organizations, KOCCA and KIPA. Table 48 compares the key points of both organizations. On the basis of the cultural content concept, KOCCA looks at content as a cultural product and focuses on overseas expansion. In the meantime, KIPA promotes the development of digital content within the context of information technology. KOCCA also considers the diffusion of the digital content across diverse genres under the auspices of positive support, as well as recognizes the influence and importance of the information technology industry for the Korean economy as a whole.

MCT thus officially claims to support animation and has more organizations that possess programs which target the animation industry. Therefore, this research focuses on

MCT and KOCCA even though MIC and KIPA share several perspectives with MCT and KOCCA.

Table 48. Policy Comparison of KOCCA and KIPA

	KOCCA	KIPA
Basic concept	-Cultural content	-Digital content
Main purpose	-Being one of five major content producing countries	-Becoming a mecca for digital content
Driving policy	-Activating foreign markets -Intensifying capacity to make original works -Activating local cultural industry	-Activating the domestic market -Strengthening industrial foundation
Service to build up	-Korea Content Resource Center	-Digital Content Multiplex
Key points of supporting programs	-Opening new foreign branch offices -Managing permanent markets -Operating cultural content academies -Administrating joint production studios	-Providing digital content service -Constructing knowledge information & culture center linking with libraries -Accelerating the development of digital technology joining with Electronics & Telecommunications Research Institute (ETRI)

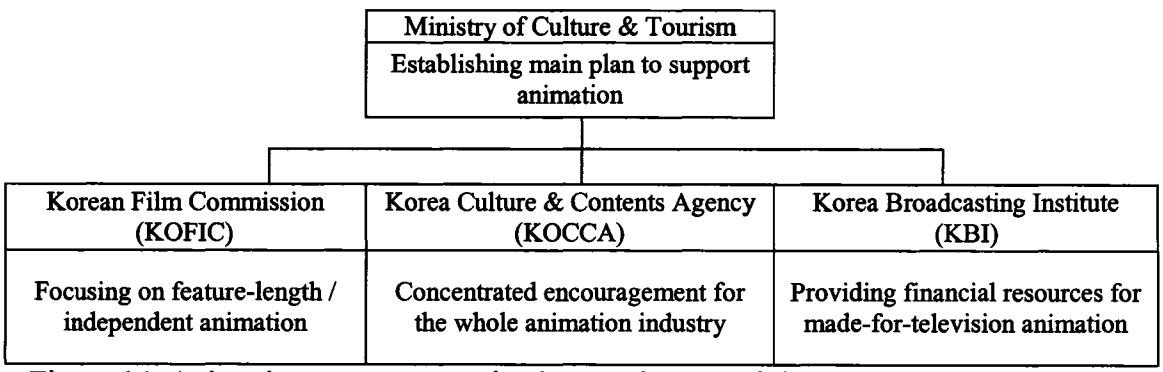

Figure 14. Animation support organizations under the Ministry of Culture & Tourism. *Note.* From *2002 manwha saneob tonggye: Aenimeishyun saneob* [2002 cultural industry statistics: Animation industry], (p. 17), by MCT, 2002, Seoul: MCT.

MCT has three organizations within its structure: the Korea Film Council (KOFIC), the Korea Broadcasting Institute (KBI), and the Korea Culture and Content

Agency (KOCCA) (see Figure 14). Each organization has its own support programs for the animation industry. KOFIC has diverse programs such as one that supports creative animation among college students, another that fosters independent animation, and a third that supports public animation. KBI handles animation as a part of television programs with its focus on providing financial support and maintaining production support of made-for-television animation.

These support programs of both KOFIC and KBI, however, have limited scope. They support animation not as an industry in and of itself, but rather as part of their major areas. KOFIC thus looks at animation as one of the movie genres and supports only feature-length animation while KBI deals solely with made-for-television animation. Instead of supporting the whole animation industry inclusively, the main target of each organization is narrowed to formats that are either feature-length (KOFIC) or made-for-television (KBI).

Unlike both KOFIC and KBI, the main target of KOCCA is much wider. KOCCA targets not only animation but also comic books, music, edutainment, and mobile. Still, it has several support programs that focus exclusively on animation. Its animation support programs are so diverse that their support ranges from production to business marketing, market research and financial investment.

Table 49 lists major support programs carried out in 2004. The first three organizations are under MCT while MIC has KIPA; KBC and Seoul Animation Center work independently. In terms of quantity, the programs of KOCCA and KOFIC are the most extensive, and KIPA also operates a similar number of programs. But, KIPA's policy considers animation as digitalized software, and thus is not directly connected to

animation support. For example, Superb Digital Content Production Plan Support and Digital Content Competition Prize do not have an animation sector. But, these digital content sectors generally deal with animation as digitalized software. Contrary to KIPA's programs, those of KOCCA and KOFIC clearly express that they are only for animation. In addition, KOCCA covers all formats of animation whereas KOFIC deals only with feature-length format. Therefore, MCT can be recognized as the major ministry in charge of the animation industry, while KOCCA is the organization that manages most practical support programs for the animation industry.

Table 49. Major Support Programs in 2004

KOCCA	- Star Project Support - Best Pilot Product Support - Animation Foreign Distribution Support - Korean Cultural Content Export Prize - Korean Animation Competition Prize - Foreign Copyright and Legal Application Support
KOFIC	- Animation Scenario Competition - Feature-Length Animation Development Support - Feature-Length Animation Production Support - Public Animation Production Support - Independent Animation Production Support - Independent Animation Film Conversion Support
KBI	- Cultural Industries Promotion Fund Loans
KIPA	- Superb Digital Content Production Plan Support - Promising Content Localization Support - Up-to-date Promising Content Development Support - Digital Content Competition Prize
KBC	- Managing policy for broadcasting animation
Seoul Animation Center	- Seoul Short Animation Competition Support

Note. From *Animation saneob baekseo* [The white paper on the animation industry], KOCCA, 2005, Seoul: KOCCA.

The Advent of the Major Support Organization: KOCCA

The advent of KOCCA has two crucial values. First of all, it is the only national organization officially aimed at animation support. This aim is confirmed by its mission[22] that implies that the national government acknowledges the importance of the animation industry. Second, its establishment implies that the national government also acknowledges the importance of cultural industries, because it includes comics, character, and music as its main targets of support. These areas previously have not been supported officially by the national government. Because of these two values, it is necessary to analyze KOCCA in order to examine the role of nation-states.

The Main Role of KOCCA

KOCCA, which was established in 2000 in the name of Cultural Industry Support Center, started its work full-scale from 2001 on the basis of the Cultural Industry Promotion Act (KOCCA, 2004b, p. 11). KOCCA generally supports Korean companies in their producing and exporting of cultural content and encourages them to cooperate with international companies.

KOCCA is not an organization that handles animation only. It deals with all other areas with which KOFIC and KBI do not. So, KOCCA clearly expresses that it deals with comics, music, characters, edutainment, and mobile, as well as animation. These aims are confirmed from its key principle and its structure, which has four points based on cultural content: (a) to foster the advance into foreign markets, (b) to strengthen the capacity to create Korean cultural content, (c) to establish a development base for cultural content, and (d) to systematize support projects (Kim, H. S., 2004, p. 70). That is, these four

[22] Retrieved November 5, 2003, from http://www.koreacontent.org/weben/etc/kocca3.jsp

points are applied to all industry areas on which KOCCA focuses in the name of cultural content. Its structure is mainly composed of three divisions: Strategic Planning Division, Training & Technology Development Division, and Industries Promotion Division. This structure means that KOCCA's main role is basically to develop cultural content.

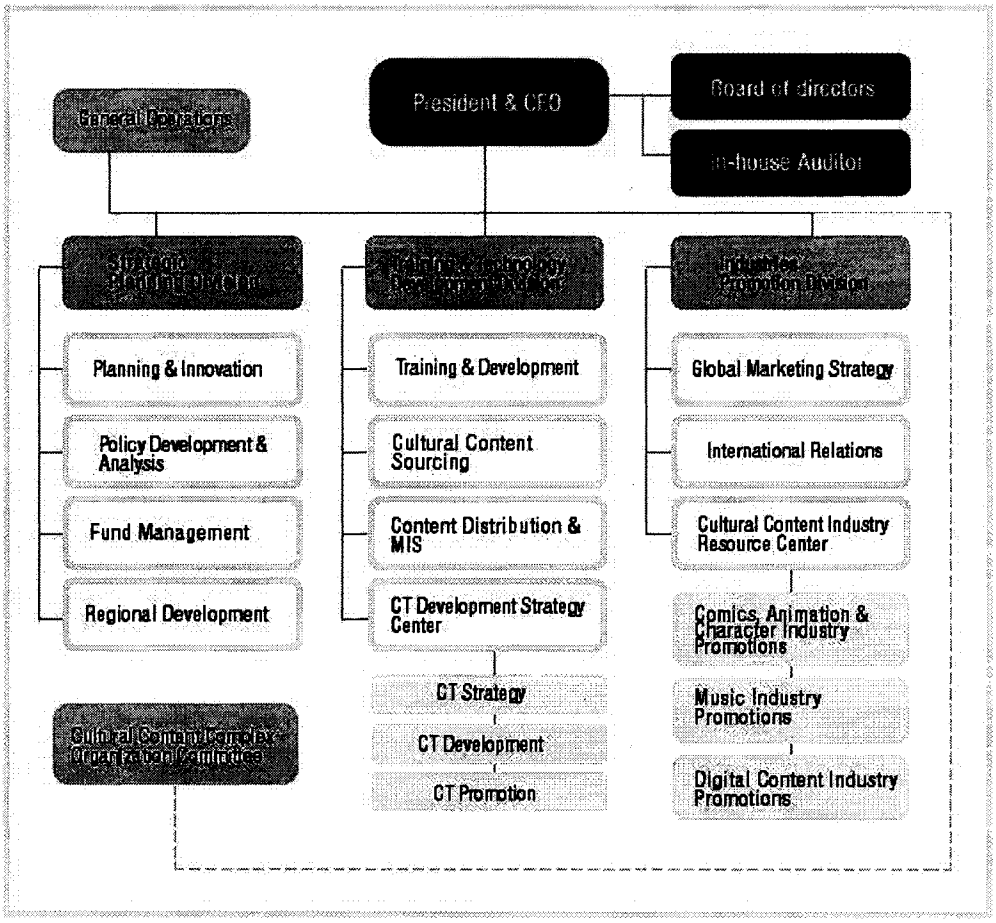

Figure 15. Organization structure of KOCCA.[23]

But, the important point to note here is that KOCCA has a separate post for animation. One of the departments under Industries Promotion Division is the Cultural Content Industry Resource Center and it manages Comics, Animation & Character

[23] Retrieved September 20, 2005, from http://www.koreacontent.org/weben/etc/kocca5.jsp

Industry Promotions (see Figure 15). Animation is clearly mentioned as the industry area to be supported, and only KOCCA among all the organizations that provide animation support programs manages the separate post for animation.

Support Programs

As mentioned previously, KOCCA covers not only animation but also other areas of cultural industries such as comics, characters, music, and edutainment. There are two reasons for this assignment of responsibilities.

The first reason is the issue of task division under the control of the Ministry of Culture & Tourism. As in Figure 14, there are three main organizations that focus on supporting cultural industries. KOFIC focuses on movies while KBI deals with broadcasting. For a long time, both movies and broadcasting have been dealt with separately under the auspices of these two organizations. Except for these two areas, other areas have not been supported separately. But, as the importance of cultural industries has grown since the 1990s, the government has decided to establish another organization that can cover other areas. So, KOCCA states that it focuses on the industrial growth of all commercialized cultural content to differentiate its focus from that of KOFIC and KBI.

The second reason is that all areas which KOCCA deals with are closely connected to one another. For example, animation can be re-released in the shape of comic books while characters of animation can be developed and sold as separate toy characters. Furthermore, these characters and storylines of animation can be used as the source of edutainment. That is, these areas can be handled and supported on the basis of the OSMU strategy.

Table 50. Animation-Related Support Programs of KOCCA in 2004

Type	Industry area	Programs
Production process support	Comprehensive area	Star Project Support Cultural Content Technology Development Cultural Products Loan Support
	Animation area	Best Pilot Product Support
	Mobile & Edutainment area	Best Internet Mobile Content Support Edutainment Production Support
Marketing process support	Comprehensive area	Cultural Content Export Award Total Information System Holding international exhibitions
	Animation area	International Distribution Support International Exhibition Participation Support Publishing Directory Publishing animation industry white paper International Business Consulting
	Character area	International Exhibition Participation Support Promoting character industry worldwide Holding Seoul Character Fair Character licensing support Publishing character industry white paper
	Mobile & Edutainment area	Supporting foreign market advance of mobile content Best Edutainment Content Promotion Support International Exhibition Participation Support

Note. From *Animation saneob baekseo* [The white paper on the animation industry], KOCCA, 2005, Seoul: KOCCA.

Because of these two reasons, KOCCA covers several areas altogether and its support programs are managed to a degree that can be applied to all areas. The following are confirmed as key points of its support programs: (a) the activation of cultural content creativity, (b) the training of cultural content specialists, (c) the development of cultural content technology, (d) the implementation of cultural content marketing, (e) the creation of a cultural content export base, (f) investments and loans for cultural content, (g) the demand creation of cultural content and the promotion of culture to use content, (h) the

establishment of policy and research analysis, and (i) the establishment of a cultural content development base (KOCCA, 2004b). Centering on these nine points for its support, KOCCA carries out diversified and detailed programs; animation in particular is supported as one area of its cultural content.

The practical support programs for animation on the basis of these key policy points are largely categorized into two types: one is production process support and the other is marketing process support. Table 50 lists several practical programs for the animation industry. Two types of support are divided into several fields by industry area; animation, character, edutainment, and comprehensive.

Among these support programs, two programs that are worthy of attention are the Star Project Support and the Best Pilot Product Support. There are three reasons for their distinction. First of all, this current research focuses mainly on the production side of digital animation. Thus, the focus needs to be narrowed to the production support programs. Second, among support programs in the production process support area, only the Star Project and the Best Pilot Products Support concentrate exclusively on the animation industry. Two support programs of the mobile & edutainment area are connected to animation, but they were not originally designed for animation. In the case of both the Cultural Content Technology Development and the Cultural Products Loan Support, they can be applied to other areas such as music, character, and comics. Particularly, in the case of the Cultural Products Loan Support, a similar type of program is managed by other organizations such as KBI (the Cultural Industries Promotion Fund Loans, see Table 49). The Star Project Support is also included in the comprehensive area, which means this project also can be applied to every industry area that KOCCA covers.

Nonetheless, the reason to consider the Star Project Support is that it has a separate division for animation. Third, both programs directly relate to industrial characteristics of digital animation that are mentioned in Chapter 5. Both programs attend to co-production with foreign companies and the OSMU strategy. Therefore, it is necessary to focus on both the Star Project Support and the Best Pilot Products Support.

Best Pilot Product Support

The Best Pilot Product Support is carried out annually and all companies which create original animation can apply for this support. As seen in Table 51, this support program is intended to identify Korean animation of good quality in an early stage, provide opportunities for this animation to advance into the global market, produce animation with foreign companies, and secure more financial investments. Because this support program targets pilot rather than completed works as well as decides to support only on the basis of pilot works, it is available for companies that are in the production process.

Table 51. Best Pilot Product Support

Purpose	- Finding and raising worthy original animation at an early stage - Providing opportunities for investment and co-production in the global program markets
Applicants	Any original works planned in Korea
Support target	Any kinds of formats available for attracting international investments
Support type	Within 80% of the whole production cost
Total budget	$1,083,000

Note. From "Animaiton saneob hwalseonghwareul weehan jiwon jedo yunku" [A study of the support systems for animation industry], by Y. K. Chai, 2003, *Kyewon Nonchong, 9*, p. 547.

The Best Pilot Product Support is largely divided into two types: big project on the one hand and medium and small project support on the other. The existence of production experience is of critical concern as well as the animation format, that is, whether animation is feature-length or short format (see Table 52).

Table 52. Type of the Best Pilot Product Support

Type	No. of projects	Total fund	Condition
Big project	About 5	$125,000	It needs either the experience to produce animation with the full story line that can be sold or the actual results to attract foreign investment (including co-production)
Medium & small project	About 10	$37,500	New production plans and companies are the subject except for the applicants of the Big Project

The important objective of this support program is that it encourages foreign investment and co-production in addition to helping animation to advance into the global market. These two purposes are well matched to the industrial characteristics of digital animation. As examined in Chapter 5, digital animation, contrary to cel animation, has had more success in advancing into the global market and operates in several ways, such as by emphasizing global sales over domestic release and by increasing co-production contracts. In addition, receiving this support is helpful to attracting foreign investors, because this support can work as evidence that the animation is qualified by the national government. Therefore, the Best Pilot Product Support program fosters digital animation in several very useful ways.

Star Project Support

The second support program that is helpful to digital animation is the Star Project Support. The Star Project Support, like the Best Pilot Product Support, selects candidates

for animation works every year at which time four steps of strict examination go into effect. The funding for each selected animation is between $41,000 and $83,000. This amount of money is not great enough to cover most costs of animation production, but the Star Project Support can work as one way to cover some part of the production cost.

The reason to consider the Star Project Support program important for digital animation is that it relates to the One Source Multi Use strategy, which is highly valued by digital animation producers. Therefore, the Star Project Support, unlike the Best Pilot Product Support that solely focuses on animation, is crucial not only for animation but for all areas that KOCCA takes care of, such as music, comics, and character. That is, this program purports to oversee the successful outcome of a cultural product and to connect its success to other areas. As seen in Table 53, the Star Project Support program's main purpose is to create a successful model based on the OSMU strategy and to apply this model to other areas of cultural industries.

Table 53. Star Project Support

Purpose	The development of a successful business model based on the basis of the OSMU strategy
Applicants	All cultural content products including animation
Support target	Companies or organizations producing cultural products
Support type	Support the production cost: $833,000 maximum
Total budget	$2,916,000

Note. From "Animaiton saneob hwalseonghwareul weehan jiwon jedo yunku" [A study of the support systems for animation industry], by Y. K. Chai, 2003, *Kyewon Nonchong, 9*, p. 546.

As mentioned in Chapter 5, business diversification of digital animation is still limited to some areas such as developing character and increasing global sales, resulting

from the fact that there is no digital animation to achieve success as the one source that can be applied to other areas. This shortage of one source success is also mentioned by some interview respondents such as J. M. Lee and C. W. Han. Therefore, the Star Project Support program can work as one of the important support agencies that create a representative model which connects digital animation as one source to other areas of cultural industries.

Implications of Support Programs and Organization's Movement

There are several government ministries and organizations that support digitalized animation. Among them, both MCT and KOCCA manage the most support programs with two crucial implications. The first is that both MCT and KOCCA are considered as the main organizations to support digital animation. Because there are no prescribed rules to control and arrange the role and scope of each ministry and organization, the competition is expected to continue among ministries and organizations. Nonetheless, strengthening and emphasizing the role of KOCCA means that both MCT and KOCCA will be the main organizations to deal with the digital animation industry.

The second point is that the support policy ensures the maintenance of a certain distance rather than the strengthening of its role and involvement with cultural industries. This policy is based on the objective of raising digital animation as an independent area in the future. At the same time, the national government also aims not to create any stumbling blocks that could affect international negotiations when animation becomes a critical issue in the international trade of films.

Based on these points, the national government has begun to change its direction, as witnessed from its attitude. The national government gradually has placed more

importance on market principles and has led the industry to survive on its own. What B. M. Lee says supports this point:

> The general principle of the national government in terms of animation policy is not to support everything related to the animation industry but to supply something that cannot be filled by the industry itself. To put it differently, the national government generally sticks to the ground rule that the industry should be controlled not by the nation-states but by market principles (personal communication, October 24, 2005).

An anonymous respondent demonstrates a similar viewpoint:

> It is true that the support on the nation-state level has continued from the 1990s. But, the opinion that the national government has to take a leading role in raising cultural industries is appropriate only when the industry was not fully matured. Once the industry and the market grew to a certain level and had competitive power, it is natural for the national government to stop meddling in the market and the industry in the name of support. Particularly, because there are several issues to consider such as the international trade agreement, the government intervention does not have any positive effects if the industry wants to be global through advancing into foreign markets (personal communication, October 24, 2005).

Opinions of these two people show that it is important for the national government to provide production companies with opportunities to produce more animation. It is more crucial, however, that the principles of how the national government gives support should be decided and managed by market principles.

This attitude of the national government is already perceived in how it manages support programs and its affiliated organization. This support is in the process of changing from an area-based system to a field-based system. That is, the support system has been based on specific areas such as animation, music, comic books and so on, but recently is being redirected to specific fields such as copyrights, technology development, and market analysis. B. M. Lee discusses this point:

> ...market principles should have priority and the national government has to focus only on areas that civilians cannot solve by themselves. Developing technologies, training skilled labors, and providing crucial information are cases in point, as you know. The national government

> acknowledges these points as its duty and its policy reflects on these points. So, the focus of policy is being directed toward fields rather than areas (personal communication, October 24, 2005).

Moreover, B. M. Lee adds that the rapid development of technologies also leads to a change in the policy target:

> And, because technologies are being developed too rapidly, digital animation is also hard to be differentiated from other areas such as games. In addition, the media are also being diversified so fast. DMB is a good example. These result in blurring boundaries in the classification of the area and make policy managers feel that it is hard to decide which area to support first. So, this is another reason why the national government establishes the support principle based on the field.... Let me give you one example. KOCCA set up an on-line directory system. It is called CEIS (Contents Exported Information System). Once you log onto this directory, you can search information about foreign buyers and post your information by yourself. Moreover, the directory provides any kind of information related to cultural industries. That is, CEIS covers all areas of cultural industries from animation to films, characters, and so on (personal communication, October 24, 2005).

The national government, that is MCT and KOCCA, has undertaken efforts to provide diverse support programs. There is, however, a criterion: to follow market principles. The government should not command the industry and the industry has to develop its own power to survive competitively. Rather, the national government tries to take authority through changing the way that it supports the industry.

This tendency of the government to control is also confirmed in a different case—the management of local cultural clusters. MCT designated seven cities and each city had its own cultural industry area (see Table 20). MCT and KOCCA, however, did not intervene in managing cultural clusters. They let each city manage its designated industry its own way. This attitude of the national government toward local cultural clusters can be confirmed from the opinion of an anonymous interviewee who discusses the assignment of cultural clusters:

> The assignment of local cities to cultural industries by the national government purports to use national resources efficiently. Yet, it is not a desirable strategy from a market perspective. The task to assign cultural industries should have been done by local autonomy. In principle, it is the

> right way if it happens that one local city thinks it has competitive power in one specific industry such as games, then it can choose the game industry. But, in reality, since the resources that the national government can give to local clusters are limited and local cultural industries are immature, the national government appointed cultural industries with good intentions. This appointment, however, does not remain permanently. Cultural industries grow so fast and nobody knows how the global market will be changed and which local cities will have advantages over which industry (personal communication, October 24, 2005).

This observation implies that the role of the national government should not involve the control of the local cultural industries and that such control should be limited to the identification of ways to use resources efficiently.

A similar point is found in terms of another role of the national government, that of arbitration of local governments. It is not mandatory for the national government to undertake arbitration, and in addition, there are no prescribed rules that suggest that the national government should mediate between local governments. Still, the national government focuses on mediating local governments, as well as establishing networks to connect them closely. An anonymous interviewee observes:

> What KOCCA can do for local clusters may be as a mediator. Local governments think and manage everything only from their perspective anyway. So, someone needs to mediate disputes when these local clusters are in trouble. I think KOCCA, as a third person with an objective viewpoint, can understand their problems and negotiate among local governments. The network connecting local governments as well as between the national government and local governments should be established on the basis of this context.... Also, duties KOCCA has to undertake should be based on this context. That is, some works that local government cannot do by themselves are what KOCCA needs to be in charge of. For example, in the case of international marketing, it is almost impossible for each local government to have its own international marketing experts and to open foreign branch offices individually. It is wasting the resources that local governments possess. If the national government opens branch offices in the world and provides information for local governments, it would be for the good of all local governments. But, one thing to keep in mind is that KOCCA should not make this network as subordinate in the relationship (personal communication, October 24, 2005).

That is, the national government makes attempts to be in charge of works that only it can operate. Yet the national government is able to maintain an objective viewpoint and control its authority. This attitude of the national government stems from the principle of

support rather than regulation. When the main principle of cultural policy was regulation, it was only the national government that had the authority and power to deal with cultural industries. For the purpose of protecting traditional culture, the national government kept its strong authority. After the principle was changed to support, however, the national government acknowledged the necessity of a different view of culture: it now considered culture as cultural products not solely under protection inside Korea but developed and promoted to the world as a whole. In order to increase the competitive power of these cultural products, the national government began to provide diverse support programs. In addition, after witnessing the intense international debate about cultural products especially films, the national government recognized that other cultural industries would face similar problems and decided to maintain the scope of its authority. Therefore, it is possible to infer not only that the role of the national government has changed, but in the midst of this change, its own power and authority has not become stronger.

The Local Government Policy: Establishing Regionalization

The initiation of the local autonomy system in 1995 led local governments to acknowledge the necessity of a specific industry to lead and develop local economies; as a consequence the national government decided to select cultural industries to be the driving force behind local economies. Based on this choice, the cluster strategy was introduced to develop cultural industries systematically and efficiently. Seven cities were selected and Chuncheon was designated as the city of animation.

This selection, however, does not preclude cities from using other areas that were already chosen by other cities. As a result, some cities such as Bucheon selected and

developed the animation industry in their own ways. Yet, because Chuncheon was officially chosen to house the animation industry, this research focuses on Chuncheon.

The General Environment of Chuncheon

Chuncheon, selected as the animation cluster, is situated in the mideast of Korea and is the seat of the provincial office of the Kangwon province. Because of its natural environment, it was also designated as the area to preserve water resources. Therefore, the manufacturing industry has limited development in this area, and instead has focused on the tourist industry. That is, preservation rather than development is at the center of the Chuncheon economy.

As of 2004, the entire population of Chuncheon was at about 250,000 and its population density is much lower than metropolitan areas such as Seoul (Lee, S. J., 2004, p. 3). Yet, because it has focused on developing the tourist resources of its economy, many diverse events and festivals that are managed either by the local government or by civilians have been developing and as a result the basic cultural infrastructure is not too reasonable.

Chuncheon already had focused on animation before it was chosen as the animation cluster and made efforts to develop the animation industry as well as the information and communication industry after 1995. In addition, since attracting the animation industry was the public promise of the first mayor elected by popular vote, Chuncheon was able to become an animation cluster in the early 21st century (Lee, S. J., 2004, p. 11).

Systems for the Animation Industry Support

There are two organizations to support the animation industry: the Chuncheon Foundation for Culture Industry (CFCI) and the Gangwon Information & Multimedia Corporation (GIMC) (see Figure 16). Both are under the control of the Bureau of Economy & Welfare. In 1995, the first mayor elected by popular vote created the Bureau of Knowledge Culture Industry as well as the Future Industry in order to provide administrative services for the animation industry. In the process, however, the image of Chuncheon was changed from the city of cultural industries to that of tourism and leisure by the second mayor who too was elected by popular vote after 2003. Next, the Bureau of Knowledge Culture Industry was abolished, and both organizations were placed under the control of the Bureau of Economy & Welfare. Moreover, the character of both of these agencies was changed into a civilian foundation (Kim, H. H., 2004).

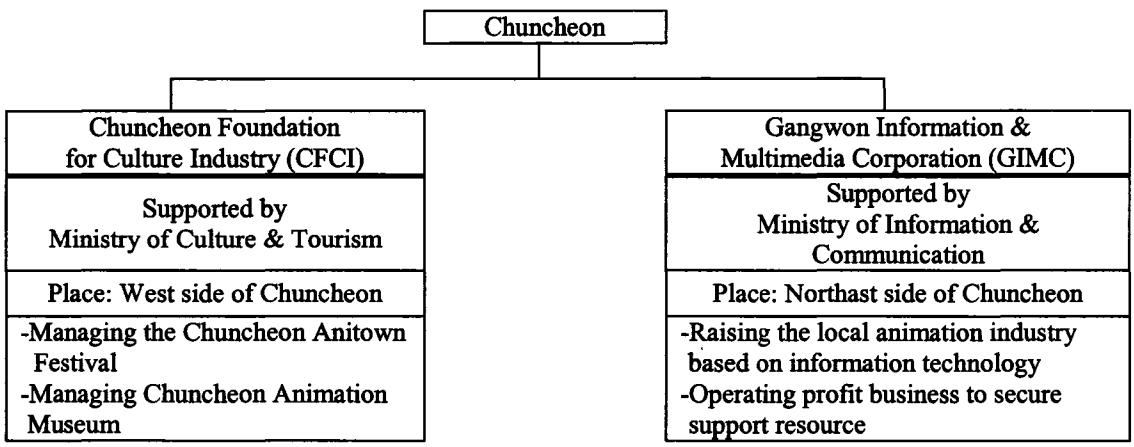

Figure 16. Animation support organizations in Chuncheon.

The Chuncheon Foundation for Culture Industry (CFCI) was established thanks to the support of MCT and KOCCA, with the aim of supporting the animation production and developing the local economy. Yet, after the production support task was transferred

to GIMC, its mission solely was focused on the management of the Chuncheon Anitown Festival as well as of the Chuncheon Animation Museum. In particular, since Chuncheon Digital Studio was moved to GIMC, CFCI has not had any practical production support programs.

In contrast to CFCI, GIMC, established with the help of MIC, manages the Hi-Tech Venture Town by combining information and biology technology and oversees the support of animation production. In addition, GIMC is in charge of providing technological and labor support for live-in companies, securing information databases, and developing software (Lee, Y. J., 2004, p. 93).

While CFCI manages consumer-oriented programs, GIMC deals with producer-oriented support programs. Many kinds of production supports are managed exclusively by GIMC. This dual support system is not seen in the other six cities. An anonymous interviewee views this dual system as such:

> Chuncheon is such a unique case. I mean, the existence of two organizations in one local city is peculiar because other major local cities such as Busan, Daegu, and Kwangju have only one support organization each. Actually, one needs to understand the unique local situation that only Chuncheon has. Otherwise, it is hard to figure out this dual support system. Anyway, in the case of supporting production companies or industries, GIMC is the one to take care of that part. Meanwhile, CFCI generally focuses on events such as the Anitown Festival. (personal communication, October 24, 2005).

G. H. Sul explains this dual system in the following way:

> To create a balanced development on both sides of the Soyang River, one side makes a cluster on the basis of the Chuncheon Animation Museum and the other side manages the animation studio with the information technology (see Figure 16). That is, one is the offline development with the museum and the other is the online development. This is why Chuncheon has a dual support system. But, it is anticipated that these two organizations would be merged into one representative agency in the near future. Managing the Chuncheon Anitown Festival together these days is a case to demonstrate that they will make one unified support system (personal communication, November 7, 2005).

Thus, as Sul explains, this dual support system was composed for the purpose of making balanced development for the whole Chuncheon area at first, which means the use of the animation industry is basically only for the development of the local area. Nonetheless, the shift to merge the two organizations into one system implies that Chuncheon will make further developments not solely as the local cluster but as the regional cluster as a whole, suggesting that this city is becoming the center of regionalization.

Local Animation Industry Development: Materializing Regionalization

While one regionalization has been created through co-production by production companies, the other regionalization has occurred through the planned workings of one policy organization; the latter was established by GIMC. In particular, the effort that GIMC has shown as an investor/producer, system organizer and policy manager has enabled Chuncheon to actualize regionalization in the local area.

The Structure and Role of GIMC

GIMC was established with MIC's support and based on laws drawn up in the Software Promotion Act. This organization started with the name of Soyang Soft Town and focused on the information industry exclusively. But after changing its nature and title in 2003, GIMC focuses now on raising the local economy by combining information technology and cultural content. Its drive to unite both the IT industry and cultural industries is reflected in its main objective (see Table 54) as well as in its task process that uses its technical facilities (see Figure 17).

Table 54. Main Purposes of GIMC

Development of regional animation industry	The basic business principle at GIMC is to generate added value through building a creative animation cluster in the region and returning the profits back to the community
Development of content based IT industry	GIMC is dedicated to the development of a large scale IT cluster through content development, management, and application, and the maximized synergy effect of various media services
Business model to secure sustainable development resources	GIMC is making its transition from sub-contract production to self-production for the continuous supply of development resources

Note. From GIMC Pamphlet Guide.

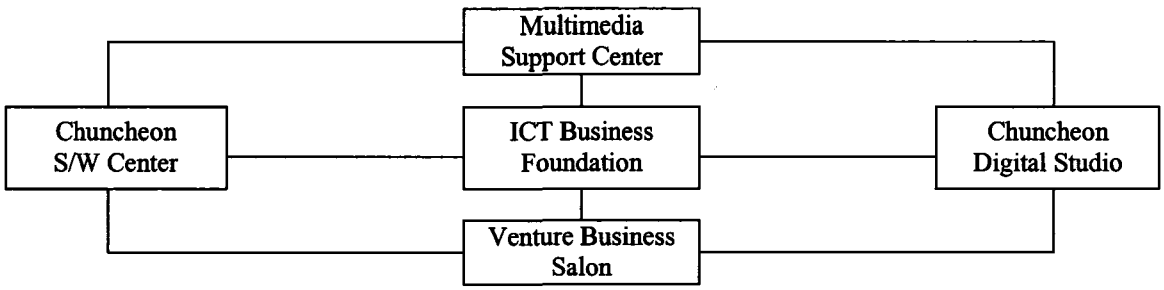

Figure 17. GIMC's animation production system on the basis of its information technology.[24]

To solve the chronic problem of the local economy, that is, financial stability, GIMC secures the financial support of several ministries. In general, one local organization to promote cultural industries is dependent on the support of one national ministry. But, GIMC does not limit its financial resources and takes advantage of diverse support of its projects. For instance, in order to operate its main public projects, it relies on the support of several ministries of the national government (see Table 55).

For example, J. K. Kim discusses how much funding was collected from these diverse sources:

> ... Of course, GIMC still receives financial support from several areas. Currently, about $1.7 million is needed every year to support the local animation industry. So, GIMC, under the name of operating expenses, received about $667,000 from the Chuncheon city in 2004. And, as working

[24] Retrieved September 28, 2005, from http://www.gimc.or.kr/english/sb01/sb0104.asp

expenses, GIMC received about $1.3 million from MIC. In addition to these funds, GIMC receives the national expenditure. For example, from MOCIE (Ministry of Commerce, Industry and Energy), GIMC annually receives about $1 million for three years under the name of manipulating industry structure expenses (personal communication, October 7, 2005).

Table 55. GIMC's Public Projects and Funds

Project	Funded by
Regional animation industry development project	Ministry of Commerce, Industry and Energy
Regional activation program	Ministry of Information & Communication
Venture promotion program	Small and Medium Business Administration
Regional college innovation capacity building Project	Ministry Education & Human Resources Development

Note. From GIMC Pamphlet Guide.

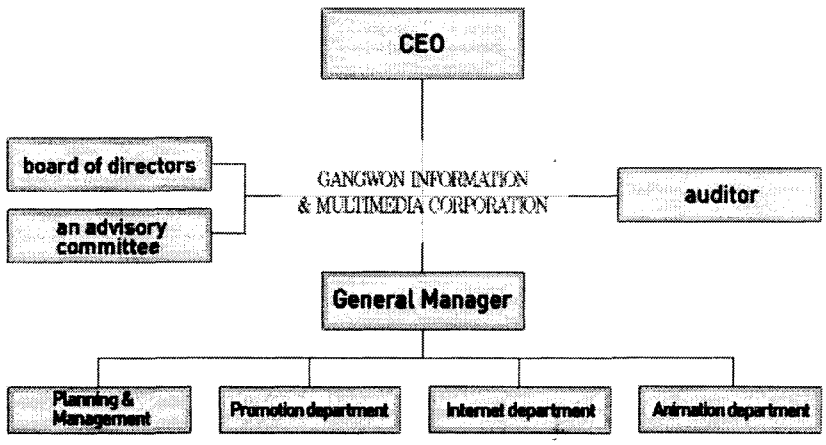

Figure 18. Organization Structure of GIMC.[25]

The mission to develop animation is seen in its structure. As in Figure 18, GIMC has four departments and one of them is the Animation Department. This department, unlike other departments, is divided into two teams: one is the Animation Business Support Team and the other is the Animation Production Team. This division means that GIMC focuses not only on the main production process, but also on animation

[25] Retrieved September 28, 2005, from http://www.gimc.or.kr/english/sb01/sb0106.asp

management. This specialized system enables GIMC to play three roles—investor/producer, system organizer, and policy manager—in the process of establishing its own regional network.

Table 56. GIMC's Equipment and Production Capacity

Classification	Equipment	Production capacity
2D	Toonz, Retas Pro, USAnimation, Animo, PEGS	300
3D	3D Maya, 3D Max, Character Studio, Light Wave, After Effect, Combustion, Softimage FX	50
Post	SR class HD editing system, recording system for various formats, film recording system	10
Render Farm	40 CPU	2

Note. From GIMC Pamphlet Guide.

For the most part, GIMC has created a production system in order to give companies an opportunity to produce animation works easily in Chuncheon. Moreover, GIMC itself also has taken advantage of its own system to itself become a producer. As is demonstrated in Table 56, production systems that can handle 2D, 3D, and post production processes are equipped with GIMC's digital production studio: Chuncheon Digital Studio (see Figure 17). Particularly, by furnishing all systems that are totally related to the digital production, GIMC follows precisely the current trend to produce animation digitally. This studio thus is able to produce 100 episodes of 20-minute made-for-television animations in a year. *Mateo* is a good example of GIMC's work as a production organization. GIMC therefore is not only supporting production companies, but also participating in animation production with its studio.

GIMC's Movement for Regionalization

The reason GIMC can be judged as the key point of regionalization not only lies with its production participation and its equipment support, but also with the three functions that GIMC demonstrates as a policy manager, investor/producer, and system organizer. By playing these three roles, GIMC enables Chuncheon to make its own global network and to establish regionalization.

First of all, GIMC tries to be more than a support-based organization, serving as the hats of both producer and investor. These shifts in roles resulted from what GIMC had done from the mid 1990s. According to J. K. Kim:

> ...from the early 1990s until the early 2000s, Chuncheon has made lots of trials and errors. We attracted production companies with equipment. But, most of them left and only four or five companies stayed in the early 2000s.[26] This made GIMC lack a clear vision for developing the local animation industry. In addition, the national government began to have doubts about Chunchen's ability. That is, it criticized whether Chuncheon was a place with competitive power. It was in 2003, however, that GIMC took a turning point by changing its nature into a civilian foundation.... And, through all of its trials and errors, we got to know about, at least, what we should not do.... We also learned market principles.... So, we decided that we should become a practical business organization and should not stay just as a support-oriented organization. On the basis of this decision, GIMC started to manage practical affairs. Then, GIMC itself could grow enough to attract other companies again. After that, Chuncheon was able to become a real animation cluster (personal communication, October 7, 2005).

Thus, according to J. K. Kim, Chuncheon finally found out the direction to go by its experience and, in the process, realized the need to encourage original work production. Such original productions were possible after GIMC itself changed its missions and functioning. The reason why GIMC can be judged differently today compared with other local organizations and why Chuncheon is judged as the site at

[26] What J. K. Kim points out as the mistake is confirmed by S. H. Hong. S. H. Hong says that "the local government used to say that the government is providing equipment and facilities and is attracting production companies to move to the local area. But, it is useless unless there are animation projects and direct financial investment by the local government" (personal communication, 2005.10.13).

which to view the materialization of regionalization is reflected in the change of its nature and role, as demonstrated by the case of the *Mateo* production. As J. K. Kim states:

> The reason why Dong Woo wanted to work with us even though Dong Woo is big enough to handle animation business alone is the original work. Dong Woo is a huge company in production, but, is not if we look at this company from the viewpoint of making original works.... (Making *Mateo*) is, like GIMC, an investment to Dong Woo. Dong Woo left many of the production tasks to GIMC. GIMC also owes to Dong Woo the establishment of its production studio and setting up the whole production process system. In return, Dong Woo requested GIMC to produce original works. That is, Dong Woo wanted to create its own original work through co-production with GIMC. Now Dong Woo is driving another project with GIMC, which is *Origami Warriors*. SBS in Korea, Bandai in Japan, SMG (Shanghai Media Group) and PMI (Perfect Multimedia Institute) in China are also participating in this animation. That is, we have created a so-called North East Asian Consortium. In addition to this, Dong Woo is producing another low-cost animation with GIMC (personal communication, October 7, 2005).

This relationship between GIMC and Dong Woo is not one between a production company and a support organization, but rather like that of co-production partners. This co-production affiliation gives GIMC know-how about the whole process of producing digital animation. Yet, the role of producer is difficult because GIMC is basically not a production company. Y. S. Ahn discusses the difficulties experienced by GIMC through co-producing *Mateo*:

> Public organizations like us, as you know, have so much paperwork. For example, if there is some work that can be finished by means of one or two documents in normal companies, this work requires more than ten documents in organizations like us. In normal business companies, what the CEO says goes. But, we are in a totally different situation. More than anything else, it is highly probable that government employees in charge are replaced during operating projects. As a result, it needs to be made clear who is responsible for projects just in case.... In fact, we need to be extremely knowledgeable about both organizational work as well as business work if we really want to change the nature of this set-up. It's because we sometimes have to find a middle point between both types of work (personal communication, October 18, 2005).[27]

[27] Y. S. Ahn had the experience of working as an animator at the Han-Ho Corporation, one of the major animation production companies and as a computer graphic team manager at Dae-Gyo Computer Corporation. Because of these experiences, he could identify difficulties from the viewpoint of both positions in the interview.

In the meantime, GIMC plays the role of investor and in the process has accumulated experience about investment. This trend can be confirmed from the interview with J. K. Kim:

> Meanwhile, *Danger Rangers* is currently being made with the US....This animation was originally planned by the EA company. At an early stage, GIMC received subcontract orders to deal with the main production process of 13 episodes. It was such a good deal, but we turned the situation upside down. That is, GIMC invested $1 million and received the rights to make all 52 episodes with the exclusive rights to sell this animation in Asia. Of course, we obtained the rights to take part in the pre-production process. The reason why GIMC invested $1 million in this animation is that GIMC wanted to experience not only production but also distribution....GIMC is constantly developing business projects like the case of *Danger Rangers*. By participating in this kind of project as much as possible, GIMC can provide a successive business model, and this model will work for luring production companies to Chuncheon. This is what GIMC considers for the future (personal communication, October 7, 2005).

Through this case, GIMC has reached one conclusion: the traditional type of support such as equipment, facilities, and financial support are not the most efficient types of support for production companies. Instead, the best way to support companies is to provide a business model that combines co-production, investment and copyrights. In addition to this business model, the creation of Chuncheon's own network for connecting to foreign companies and markets is another type of support that resident companies can take advantage of directly.

Meanwhile, K. H. Sul who was at GIMC and is now at KOCCA, states that GIMC now is trying to become a system organizer:

> Any local provinces have to have a system organizer (SO). If there is a company that can take charge of the role of SO, it is good for the local area. Yet because of several problems such as the problem of supplying labors, the problem of not-fully-developed infrastructure, and the problem of technologies, it is still hard for normal types of companies to take on that role when they move into a local area.... Because it is desperately needed to have a SO in Chuncheon, however, GIMC itself decided to become a SO for the time being. The first task we decided to do as a SO was to train animation production experts. That's why GIMC activated the On the Job Training (OJT) system. We collected animators who were fired after finishing projects and, at the same time, trained students as animators.... Through this work, we gradually composed our own system. Secondly, we completely changed the format of the Chunchenon Anitown Festival. Last year, two organizations began to hold and manage the festival together and the format was changed into two

> parts. One is to promote the festival by focusing on animation artists and by connecting with the Animation Museum. The other is to promote the festival by focusing on workshops and conferences under the control of GIMC.... The role of SO is, frankly speaking, so simple. Let's talk about Pohang as a case. Pohang has companies that can play the role of SO and several companies can survive with the lead of a SO company. If GIMC can take the role of a leading company as Pohang did, it would be just a matter of time for Chuncheon to undergo remarkable development in the near future. Therefore, it would be more appropriate to say that GIMC is currently in a transition period in which it is changing its role (personal communication, November 7, 2005).

Y. S. Ahn also emphasizes that the role of GIMC has changed with one of its new roles as system organizer:

> Our role has changed from support to lead.... There are several organizations like GIMC, but no one plays the same role as GIMC is currently doing.... As the first task after we changed the nature of GIMC, we began to train people. In addition, we re-called animators who we had trained before we changed our roles.... Then, we contacted Dong Woo because we felt that we needed to produce our own project. That's why we did some subcontract works first and then co-produced *Mateo*. Through managing several projects, we systematically developed GIMC little by little. Now, we can operate our own businesses with the US and Japan. And, we have begun to attract companies again because our work load is too much to handle alone (personal communication, October 18, 2005).

Thus GIMC has pushed itself to adopt the active role of a leading company rather than to stay as a passive support organization. By taking on this role, GIMC now can attract companies from outside as well as enlarge the size of its animation industry.

As is shown in Figure 19, GIMC had added the roles of investor/producer and system organizer, structural changes that have never been done by other organizations. As a financial investor, GIMC participates in the production directly and creates profits that can be used for the next project. Also, as a system organizer, GIMC drives differentiated programs such as intensifying the function of the Chuncheon Anitown Festival and establishing a stable labor supply system.

By propelling these three different roles, GIMC has made Chuncheon into the perfect cluster. GIMC itself evaluates this change in its roles positively because now it

can manage its own projects in its own way. This affirmative outlook can be confirmed from what Y. S. Ahn says:

> Most local organizations want to have a system like us because the financial resources that the national government allocates to local organizations are not matched by what its policy asks of local organizations. The national government asks to concentrate only on supporting projects but the budget we get is only three years of funding.... Practically, it's impossible to produce this outcome within three years. That's why we set up the current system.... Other organizations are in trouble now. Despite the fact that the financial support from the national government is over next year, they still do not consider how they will cope with this situation. But, we already have designed our own strategy and have compiled some resources so far. Even though there are a million things to do still, we have some money ready to start our own businesses (personal communication, October 18, 2005).

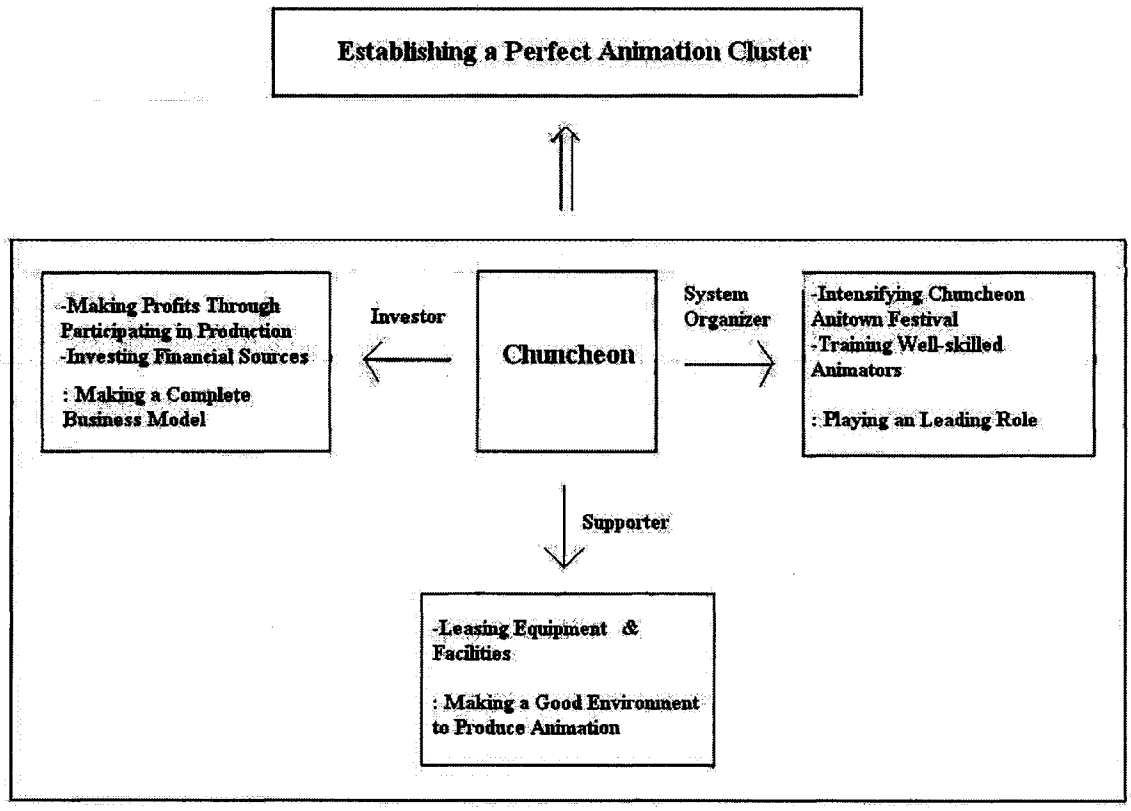

Figure 19. GIMC plays three roles in order to establish a perfect animation cluster.

Secondly, the progress that GIMC is paying attention to is the establishment of its own global network. By playing three roles, GIMC acknowledges that it is indispensable

for Chuncheon to establish its own global network. Also, GIMC realizes that providing a global network and helping production companies to advance into the foreign market are invisible but effective functions for production companies.

The division of the Animation Department into the Animation Production Team and the Animation Business Team is based on this perspective. The Animation Business Support Team focuses on running special programs to promote cooperative business development with domestic and international companies. This team also operates the global marketing and content syndication business.

K. H. Sul insists on the necessity of Chuncheon's own network. In particular, he emphasizes that the network should not pass through the national government, but rather be its own network:

> One of the critical roles that local support organizations must take is that their works should not pass through the national government. Most local areas make inroads into the world by the support of the national government. But, GIMC decided not to follow this route. GIMC thought Chuncheon needed to globalize itself by taking on the role of a regional cluster in the world with Chuncheon's own capacity. Otherwise, it is useless for Chuncheon to be a local cluster. No matter what, it is necessary to do everything without the help of the national government... (personal communication, November 7, 2005).

Based on this distinction, GIMC has tried to establish its own global network by using the festival. The creation of a global network has been actualized through two moves. The first has been to contact US production companies directly. Currently, GIMC is creating a network with Nickelodeon and Disney. GIMC has offered a public subscription during the run of the Chuncheon Anitown Festival, selected some works, and introduced them to the production staffs of Nickelodeon and Disney. This is another way to provide a chance to enter the world market. J. K. Kim explains this public subscription system as follows:

> ...the public subscription is different from the normal type of public competition. Ours does not give any prizes or provide financial support for production. It usually takes seven or eight years for one animation to be completed from the planning stage until the market release. So, the support for a year is totally useless. GIMC contacted Nickelodeon in order to introduce selected works to the international market.... The final chosen work by the production staff of Nickelodeon—four animations were chosen this year—can get a financial support for the pilot production. This gives the original producer the right to take part in both pre- and main production processes. And, GIMC is in charge of the main production process.... (Our public subscription) provides the original producer with this opportunity and we ourselves with the chance to make a profit by taking on the main production.... This year, we invited Disney to join this public subscription.... Perhaps, we will make an attempt with the Cartoon Network next year, and hold this subscription regularly. Fortunately, as the US side is also interested in establishing a network through public subscription, GIMC is going to become a global hub connecting China and the US together by developing this public subscription. We already collected some works from China and left a good impression on the Chinese people. So, as a response, some Chinese who were involved in the animation production visited Chuncheon during the festival (personal communication, October 7, 2005).

Kim's explanation suggests that the global network connecting China and the US is in the process of being created. GIMC thus is able to provide Korean animation producers with the opportunity to be introduced outside their country and also to secure their own financial sources. Without passing through the national government, GIMC, with its own initiative and plans, is making a separate global network, therefore ensuring that Chuncheon is a global hub connecting several countries and at the same time bringing about the realization of both regionalization and globalization.

The second point in making a global network is to connect not only with the US but also China. In addition to collecting works from China, Chuncheon is establishing a relationship with the city of Changzhou. Changzhou is famous as an animation production city. When contacting the Ministry of Culture in China in order to promote GIMC's public subscription, GIMC had a chance to contact Changzhou.

According to J. K. Kim, Changzhou was interested in Chuncheon's business system and is actively trying to apply Chuncheon's system to Changzhou. Because of

such planning by both cities, it is estimated that the network between these two cities will be completed within a few years:

> China is showing a similar direction as taken by Chuncheon in the 1990s. The national government has chosen some industrial areas and intensified the financial support for these chosen areas.... Making a relationship with China will be able to help a lot mutually. Because Changzhou is undertaking the same thing that Chuncheon did in the past, Chuncheon can provide Changzhou with experience and know-how.... Particularly, it is Shanghai that is only two hours from Changzhou. Shanghai is such a big and important market, but, is also showing movement to develop its animation industry. This means the relationship between Changzhou and Shanghai is somewhat similar to the relationship between Chuncheon and Seoul. Therefore, it can be predicted easily that making a network between Chuncheon and Changzhou creates benefits that are helpful to both cities.... For this reason, it would be better to direct the Chuncheon Anitown Festival toward forming a stable global network (personal communication, October 7, 2005).

The global network made by Chuncheon is analyzed in Figure 20. These trends suggest that Chuncheon is establishing its own global network as a world cluster, and is realizing its objectives of creating a regional relationship with the US as well as with China. Chuncheon can ensure the huge Chinese market in advance by providing its own experience and know-how for Changzhou, and, at the same time, can secure the opportunity to introduce original Korean works to the US by offering Asian products and new subjects for the US. The best way to achieve this goal is to use Chuncheon's own festival. K. H. Sul underscores this strategy in his statement that "Chuncheon should promote itself as the animation cluster through differentiating and strengthening the role of the Chuncheon Anitown Festival" (personal communication, November 7, 2005).

The will to make a global network is also confirmed by Y. S. Ahn. He says that "*Mateo* is the co-production animation that purports to have production experience and to experiment with our own facilities. But, from now on, we will not co-produce animation with domestic companies. We will manage co-production projects with only foreign

companies. The network with Changzhou is being established on the basis of this rationale" (personal communication, October 18, 2005).

Based on the results from Chuncheon, it is possible to conclude that Chuncheon as a cultural cluster is the local government lead type. Table 57 compares Chuncheon and Sheffield, England, a city that is also recognized as the local government lead type.

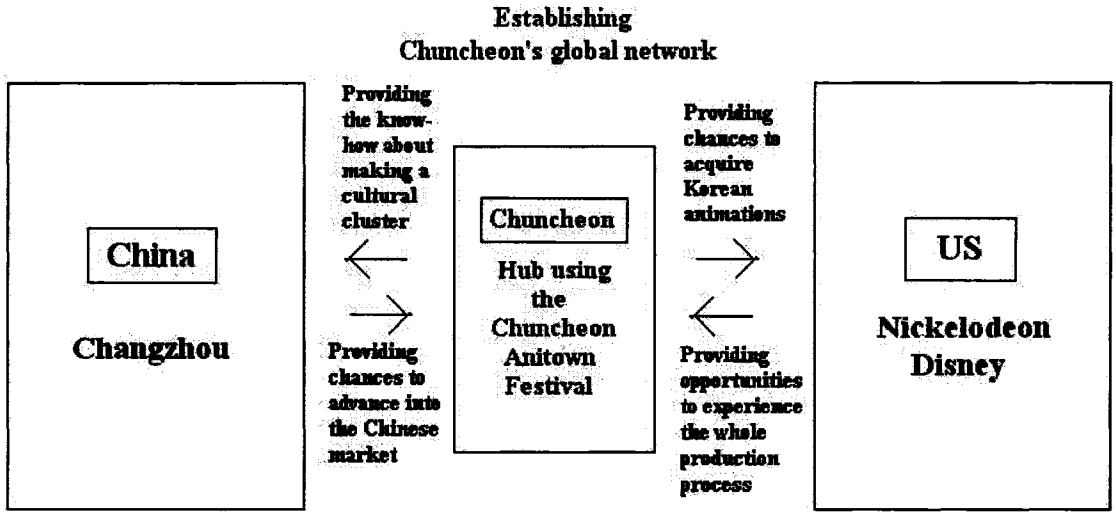

Figure 20. Chuncheon is in process of establishing a global network by connecting two regions.

Sheffield too has selected creative industries as its main industry. The reason to pick up creative industries is that Sheffield is basically known for its popular music. Several musical performers such as Joe Cocker and Def Leppard are from this area. That is, Sheffield has already its own cultural base that it can utilize. Using creative industries, Sheffield purports to revitalize its economy that has been depressed with the decline of the steel industry. In addition, Sheffield has tried to improve its living and working environment. Through managing this strategy for more than a decade, Sheffield has

produced results by improving employment, reducing the crime rate, and developing its economy.

Chuncheon, however, is different from the situation of Sheffield. The reason why Chuncheon selects animation is actually related to its geographical context. Gangwon province, including Chuncheon, is actually designated as a clean zone to protect natural resources. For this reason, any kind of manufacturing industry is limited in this province, and thus Chuncheon needs to raise its economy without polluting Gangwon province. As a result, Chuncheon has decided to develop the animation industry and to focus on digitalizing its facilities and equipment. However, because the development of its digital animation industry has started only recently, it is difficult to evaluate Chuncheon's cultural cluster strategy and to list results of this strategy as yet.

Table 57. Comparison of Two Cultural Clusters (Sheffield and Chuncheon)

	Sheffield	Chuncheon
Lead type	Local government	Local government
Main focus industry	Creative industries	Animation industry
Main reason to manage the cluster strategy	Decline in steel industry	Limits of managing manufacturing industries
Local working environment plan	Considering life quality and working environment of labors	Considering working environment of labors
The usage of financial resources	Public interests (e.g. Culture and City Restructuring)	Raising the local economy
Establishing a global network	X	In process (China, US)
Results	Improving employment, reducing crime rate, developing macro-economy	Not significant results so far

Chapter Summary

First, the findings of this chapter suggest that after the policy paradigm in Korea was shifted from regulation to support, the importance of cultural industries was emphasized and the policy system was changed into a dual system. As a result, both the national and local governments have managed support programs separately.

The second result of this chapter analysis is associated with the case of the national government: there is a main national ministry and an organization that solely focus on digital animation. They provide diverse available programs. They have not, however, intensified their authority and influential powers. Rather, they have heeded market principles.

Third, in the case of the local government, there is a main organization that deals with animation production exclusively. This organization has purported to have changed its role by itself and to have established regionalization in order to develop the local animation industry and to raise the local economy. Its workings also have been based on market principles.

Therefore, it can be said that the role of nation-states in terms of cultural industries has changed significantly and such change is observed as diversification. The national government has diversified its policies and provided some support programs that focus on the production side. Such diversification, however, has not intensified their authority and influential powers. In the meantime, the local government also has diversified its role by playing three roles simultaneously: investor/producer, system organizer, and policy manager. By taking on these diversified roles, the local government has accomplished regionalization (see Figure 21).

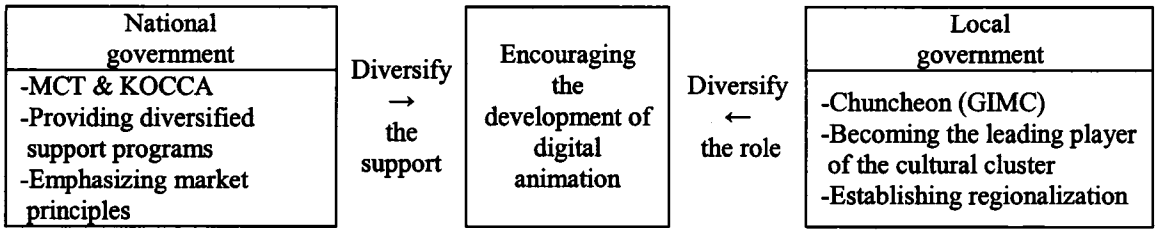

Figure 21. Dual support system for Korean digital animation.

CHAPTER 7

SUMMARY AND CONCLUSIONS

This research has examined the Korean digital animation with a focus on the production side of this industry. In order to demonstrate that Korean digitalized animation has become globalized, this study has analyzed the industrial characteristics and the policies associated with this field.

Based on theories of globalization and cultural industries, Research Question Group 1 focused on the economic area and Research Question Group 2 explored the political area.

Summary of Results

The research findings can be categorized into three parts. The first relates to the industrial environment that has encouraged the advent of digital animation. The second is about the industrial characteristics of digital animation, and the third is associated with the supporting systems for digital animation

The Industrial Context That Has Encouragd the Development of Digitalized Animation

It is necessary to explain the reason why digital animation appeared and developed in Korea. These processes are explained within three industrial areas. First, it is about the animation industry. The need to change the production system was perceived by producers and production companies. The subcontract-based production system also witnessed the decrease in orders because of the changed international situation. Second, the global success of the US digital animation along with the open door policy on

Japanese popular culture led Korea to seek an alternative to develop its animation industry.

Second, the advent of digital animation is related to the activities of cultural industries. The key paradigm of cultural policy shifted from regulation to support. Moreover, cultural industries showed a constant increase in their outcome measures. Also, cultural industries began to be recognized as the prime mover to develop local economies, and the concept of cluster was introduced as a systematic development plan. Each of these situations has encouraged Korea to acknowledge digital animation as one of the important cultural industries.

The third is related to the information and communication technology industry. After this industry was chosen as the solution to overcome the economic crisis of the late 1990s, it showed tremendous growth. New media then were being developed, and DMB was highlighted as the new hardware to help create an information society. In addition, Korea propelled the project of realizing a ubiquitous society. Thus, the development of this industry and the suggestion of new society concept have highlighted the necessity of software, that is, content.

In summary, these environmental characteristics in the three industrial areas have confirmed the importance of animation as content and accelerated the digitalization of animation.

New Industrial Characteristics of Digital Animation

There are several industrial characteristics that were not observed during the cel animation-oriented period.

First of all, through digitalizing the production process, most animation made in Korea can be judged as digital animation. The nature and shape of production companies have changed. Unlike existing subcontract-based major companies, newly appeared digital animation companies are now technology-intensive, small and mid size venture companies. They accumulate know-how by producing visual products such as commercials while engineers who know the whole digital production process take charge as both the CEO and producer. Second, these companies have led to an increase in original animation works. In addition, they place more importance mainly on foreign markets. Third, because of their positive attitudes toward foreign markets, they propel co-production projects with foreign companies.

Business diversification of digital animation on the basis of One Source Multi Use also has been observed. Overall, business diversification has not been carried to the extent as the OSMU strategy has. Nonetheless, there are two significant developments that can be judged as business diversification. The first point is the intensification of character development. Several digital animation works focus on this point and some of them have had financial success. The second point is the strengthening of global market sales. Several digital animation works have turned to global market sales as early as the pre-production phase.

The activation of co-production demonstrates the shape of regionalization. Countries that have made co-production contracts are diversified and can be divided into two groups: the Asian Group and the non-Asian Group. In the Asian Group, Japan, China, and North Korea have surfaced as partners. Through co-production with the Asian group, Korea has experienced pre- and post-production processes that hardly have been

undertaken before, has secured huge markets such as China and Japan, and has established production corporations and complexes with China and North Korea.

In the case of co-production with the non-Asian group, Canada, France, and the US have emerged as Korea's partners. By co-producing digital animation with these countries, Korea has obtained information about the pre- and post-production processes, attracted investors, ensured markets, and established real-time production pipeline using IT technologies. Thus, this dual co-production system with both Asian and non-Asian groups has materialized regionalization.

Diversified Supporting Systems

There are new characteristics in the policy to support digital animation. First of all, the paradigm shift of the cultural policy from regulation to support and the emphasis on the imporantce of cultural industries has led to a change in the government policy system. Moreover, the dual system by which both the national government and local governments manage support programs separately has been made.

Second, in the case of the national government, there is a main ministry and an organization that solely focuses on digital animation. They are the Ministry of Culture & Tourism and the Korea Culture & Content Agency. Although they are not officially designated as the prime organizations that manage animation support policy exclusively, they provide diverse available programs such as the Best Pilot Product Support and the Star Project Support. They, however, have not increased their authority and influential powers. Rather, they have allowed the digital animation industry to follow market principles.

Third, in the case of the local government, Chuncheon's choice of animation as the prime mover to raise the local economy shows significant progress. In Chuncheon, there is a main organization that deals with animation production exclusively. That organization, the Gangwon Information & Multimedia Corporation (GIMC), has diversified its role from a policy manager to an investor/producer, system organizer and policy manager. These changes have led to the development of the local animation industry and the establishment of regionalization through the creation of GIMC's own global network.

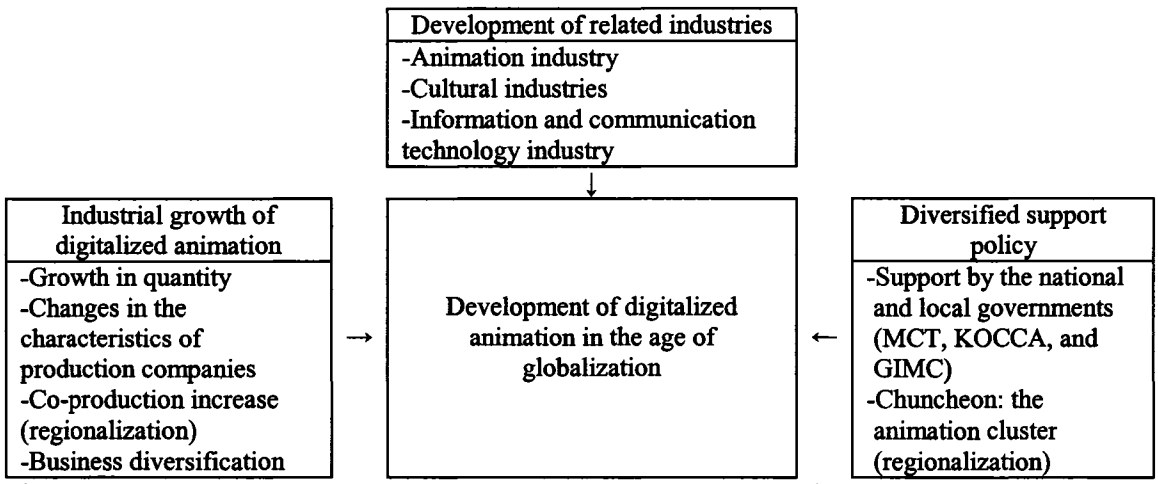

Figure 22. Three factors that encourage the development of digital animation in the age of globalization.

Figure 22 summarizes these research results as a schema. In summary, three factors, that is, the development of three related industries (the animation industry, cultural industries and the information and communication technology industry), the industrial growth of digital animation (quantitative growth, new features in the nature of production companies, business diversification, and co-production), and a diversified

support policy (dual support system and cultural clusters) have supported the development of digital animation and have led to the globalization of digital animation.

Conclusion

This research examines whether Korean digital animation is globalized. To achieve this goal, Korean digital animation is analyzed from two perspectives: political and economic.

The findings of this research are as follows:

The first finding relates to the role of nation-states (see Table 58). The role of a nation-state in digital animation clearly has changed, and the key point of the change is diversification.

Table 58. Changed Role and Status of Nation-States

The change in the role and status of nation-states: Diversification			
System		Approach	
National government level	Local government level	National government level	Local government level
-MCT -KOCCA	-GIMC	Providing diverse support programs (e.g., Best Pilot Product Support, Star Project Support)	Changing the role (policy manager → investor/producer, system organizer, policy manager)

First of all, diversification is observed from the system. When the main paradigm of cultural policy was regulation, it was the national government that took exclusive responsibility in the management of cultural policy. After the main paradigm was shifted to support in the 1990s, however, the government's dealing with digital animation was divided into two levels: the national government and the local government. One ministry

(MCT) and one organization (KOCCA) at the national government level have been in charge of managing support programs for digital animation. In the meantime, the local government has managed its own support programs for digital animation as well. Chuncheon, designated as the animation cluster, has undertaken efforts to support digital animation in its own way and GIMC has been in charge of policy management. Support programs in this dual system have been managed respectively.

Second, diversification is also observed in terms of approach. The national government has diversified its support programs. Some programs focus on the production part while others on the distribution end. The Best Pilot Product Support program and the Star Project Support program are examples of the production part. The local government, unlike the national government, has diversified its role and now plays three roles: the investor/producer, system organizer, and policy manager. Considering these three roles, it can be said that the movement of the local government has been progressive in advancing the animation industry. But, it does not mean that the local government has intensified its authority.

As reviewed in Chapter 2, there are several scholars who mention that the role of nation-states has changed in the age of globalization. These findings generally support this viewpoint in that diversification in the system and the approach demonstrates the changed role of nation-states.

The details to explain the change in Korea, however, differ slightly from theoretical suggestions provided by scholars. Steger (2003), Yeates (2001), Hamelink (1993), and McGrew (2000) examine the role of transitional corporations and international organizations as new authorities and insist that MNCs, international

organizations, and nation-states mutually influence one another. However, they claim that nation-states pay more attention to economic activities. Kim and Hong (2001) who deal with Korea, also suggest that the nation-states are concerned with economic activities such as financial support and state investment.

Even though the Korean national government focuses more on market principles and has changed its policy management and political system, their actions are not limited to economic activities at this moment. Rather, the national government is more concerned with the change itself and thus expects results that will be actualized in the future. Sánchez-Ruiz (2001) emphasizes supports the change of nation-state's role in the sense that the nation-state should not focus on protecting but rather on developing cultural industries.

Table 59. Two Types of Regionalization

	Co-Production	Cultural cluster (Chuncheon)
Purpose	Making a whole production pipeline	Raising the local economy and local animation industry
Key player	Production companies	Local government (GIMC)
Shape type	Self-generating type	Intended type
Result	Establishing two groups: Asian and Non-Asian	Establishing two regions: China and the US
Case	*Cubix*, *Netibee*, etc.	Chuncheon

The second finding relates to regionalization (see Table 59). There are two types of regionalization: through co-production and through the cultural cluster. Yet features of these two types of regionalization are different from each other.

The regionalization established by conducting co-production makes a whole production pipeline and is led by digital animation production companies that have shown changes in their nature. This type of regionalization is self-generating, because it is naturally built up by managing co-production contracts with foreign companies. Currently, regionalization by co-production takes two forms: the Asian and the non-Asian. By co-producing digital animation projects with the Asian group, Korean production companies can experience pre- and post-production processes and thus ensure bigger markets in advance. In the case of co-production with the non-Asian group, Korean production companies are able to develop the expertise associated with advanced countries in terms of the entire production process to ensure opportunities to attract investors and to secure bigger markets. *Netibee* is a case of co-production with an Asian group while *Cubix* is a digital animation co-produced with a non-Asian group.

Meanwhile, the regionalization made through the cultural cluster is the artificially developed type because it is intentionally led by the local government of Chuncheon as a cultural cluster for the purpose of raising the local economy along with the local animation industry. By playing three roles simultaneously, the Chuncheon government acknowledged the need to establish its own global network. As a practical movement, it began to connect with China and the US. The Chuncheon government has provided China with the know-how about managing a cultural cluster and in the process has ensured opportunities to advance into the Chinese market. In the meantime, the Chuncheon government has introduced Asian items including Korean animations to several US companies and has created opportunities to experience the entire production process. This type of regionalization that is led by the local government is expected to

expand its scope from China and the US to other countries, according to J. K. Kim (personal communication, October 7, 2005).

These two types of regionalization observed in Korea can be supported by the theoretical foundation provided in Chapter 2. First, regionalization in Korea is consistent with Ohmae's (1995a, b) viewpoint on regionalization. Specifically, both regionalization cases in Korea demonstrate that economic activities are achieved across national borders. In other words, if the seven cultural clusters establish extensive cultural clusters through merging neighboring clusters (see Table 20), this process will be similar to the Kansai case that Ohmae suggests for the region-state.

Second, Yeates' (2001) argument is also supported in two points. The first point is that regionalization is a "market-induced process" (p. 77). Regionalization has been established by the economic necessity of production companies and of the local government even though the main purpose of the production companies and that of the local government is quite different from each other. The second point is that regionalization works at different levels. As is observed from the findings, regionalization has been carried out both at the company level and at the city level. Moreover, it is noteworthy that these two types of regionalization constitute regional groups (i.e., Asian and Non-Asian group), a finding that also supports Mittelman's (1999, 2000) concept of regionalization (macro-regionalism and sub-regionalism).

In addition to these findings, research results can be explained on the basis of general characteristics of globalization. There are three points that are mentioned in Chapter 2 as the general characteristics of globalization: the matter of interconnection,

the role of information and communication technologies, and the role and ability of multinational corporations.

First of all, regionalization that is shaped through co-production and the cultural cluster supports the interconnectivity characteristic of globalization. Interconnection is judged to be one of the most important characteristics of globalization by scholars such as Tomlinson (1991), Boyd-Barrett (1997), Steger (2003), Went (2000), Cochrane and Pain (2000), and Mittelman (2000). In the case of Korea, production companies and the local government have established their own social networks, stretched their social exchanges and activities over the barriers of nation-states, and intensified interconnection with foreign companies and other regions.

Second, the usage of information and communication technologies in co-production is evidenced by the role of information and communication technologies. Several scholars such as Boyd-Barrett (1997), McQuail (2000), and Steger (2003) emphasize this point about globalization. Using process management network programs that were invented by production companies, high-broadband networks such as the Intranet that enables companies contact with each other in real time, and the high capacity of storage equipment that can save the entire projects easily have changed the context of co-production process, led to the increase of co-production cases, and further encouraged the globalization of animation production.

Last, the role of multinational corporations (MNCs), which is listed as the third characteristic of globalization and the focus of several scholars such as Thussu (1998), Herman and McChesney (1997), and Gershon (1997), is not clearly observed in the current context of Korean digital animation. However, there is some progress evident in

this area.[28] It is expected to cause significant changes in the Korean digital animation industry. It is the movement of M&A (Merger & Acquisition) and is led by major telecommunication companies. These major telecommunication companies are totally different from MNCs in that they do not influence other regions and countries over the national borders. Yet, the influential power they will demonstrate in the animation industry through M&A (Merger & Acquisition) is similar to what MNCs generally operate for the purpose of intensifying their power and authority.

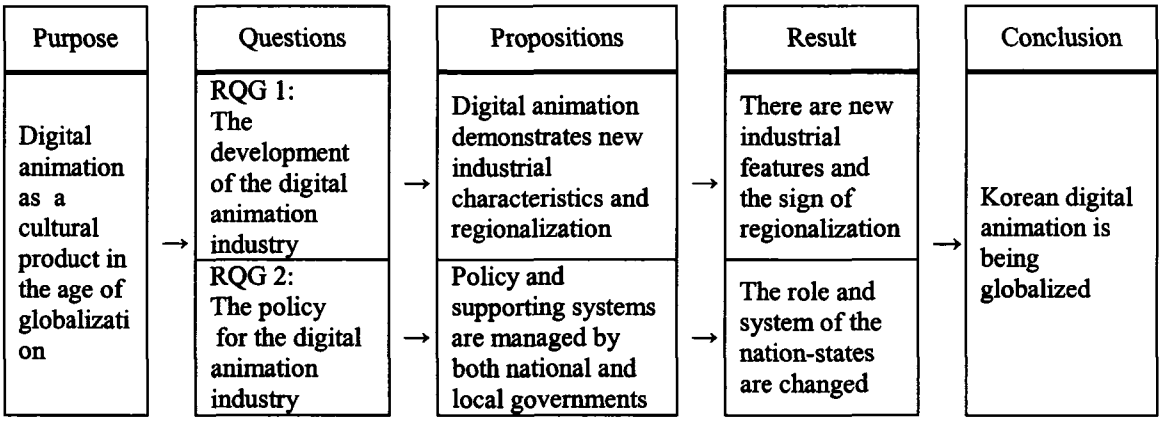

Figure 23. Research results and conclusion.

Based on these results and findings, the conclusions of this research are seen in Figure 23.

The conclusion of RQG 1 is that there are new industrial features and that the establishment of regionalization is seen by co-production. In addition, the development of digital animation and the appearance of new industrial features have resulted from the changed context of the three related industries: the animation industry, cultural industries, and the information and communication technology industry.

[28] This part is mentioned again in Implications.

The conclusion of RQG 2 is that the role of nation-states clearly has changed. The first change is that the policy for digitalized animation is managed at two different levels: one is conducted by the national government and the other is operated by the local government. The second change also is divided into two points: the first is that the national government diversifies its support programs and the second is that the local government changes its role intentionally.

Therefore, this research, in reaching its final conclusion, has found that Korean digital animation is being globalized.

Yet, there is one point to note from this research. The globalization process of Korean digital animation is operated not from the top but from the bottom level. It was the national government that insisted that there is a need for globalization and that began to globalize the Korean society. The globalization process, however, has been led by diverse forces such as corporations and local cities because they keenly realize as a result of their activities and experiences the necessity that globalization must occur first. Therefore, it is suggested here that globalization of the digital animation industry has the capability of being a good example for other industrial areas in Korea.

CHAPTER 8

RECOMMENDATIONS

Implications

This research has achieved the goal of providing strong evidence that Korean digital animation is being globalized. There is one concern, however, that should be noted. It is that Korean digital animation is not *globalized* but *being globalized*. This distinction which suggests that *globalization is in process* is emphasized because the Korean animation industry is currently in a transition period (see Figure 24).

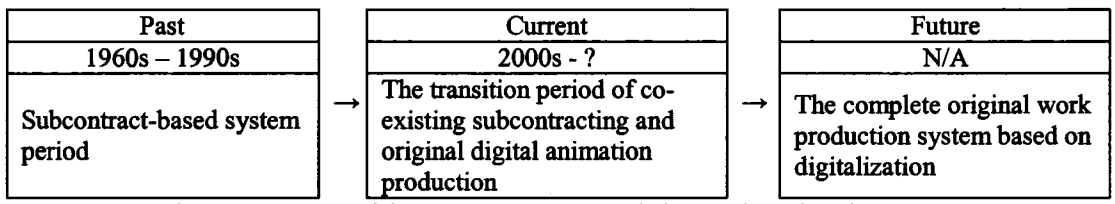

Figure 24. Transition of the Korean digital animation industry.

In the past, the Korean animation industry relied heavily on the subcontract-based production system and this system has rendered great service to the animation industry. After realizing the limit of the subcontract-based system, the Korean animation industry attempted to change its industrial nature toward the establishment of a complete original work production system through the digitalization of animation works. This movement toward change is now under way, as demonstrated by these research findings.

There are several reasons to define the current status as the transition period. First, the switch in the production structure from subcontract works to original works is not completely finished yet. As mentioned in Chapter 5, producers and production companies

began to focus on original animation projects from the late 1990s and several original projects that were digitalized began to appear before and after 2000. Second, the accumulation of experience of the entire production process has started only recently. As observed in Chapter 5, several companies chose to co-produce digital animation projects in order to complete the entire production process. Co-production cases that were explained in this research, however, demonstrate that Korea is still in process of developing the expertise of advanced countries. Third, only a few years have passed since the advent of digital animation. As mentioned in Chapter 5, the first full digital animation was released in 1999 and less than 10 feature-length formats of digital animations have been released. Therefore, Korea still needs more time to observe the production phase. Fourth, the establishment of regionalization is still in process. According to the plans of the national government, the cultural cluster is intended to be completed in 2010. Furthermore, GIMC also mentions that its redirection has not been completed yet. Fifth, there is a movement of M&A, which is already mentioned in the conclusions, in the animation industry. C. W. Han comments that this new direction was noted in 2005 and would be clearly observed in the near future. He confirms that this new movement would give rise to a significant change in the animation industry (personal communication, October 17, 2005). Lee, K. S., Lee, K. B., Ham, J. S., & Park, Y. M. (2005) also indicates that two major telecommunication companies, KT and SKT, began to merge several content providers that include animation production companies. Because of these factors, it is observed that the globalization of digital animation is still in process.

Limitations of the Research

There are two limitations associated with this research. They cannot be solved through this research, however, because they are associated with the data.

The first problem is the credibility of numeric data. This problem is already pointed out by several animation researchers such as Park, S. H. (2002) and Yu (2002). Statistical data such as reports of the size of the Korean animation industry vary by organizations. Currently, there are several agencies and organizations that publish reports on the animation industry, but they use their own criteria, resulting in different findings about the animation industry. Han (1998) points out that this unclear data problem actually is caused by the long-time black market. The animation black market is still not controlled completely and thus its production of illegal CDs and videos are widespread and popular among consumers. In addition, some information technologies such as P2P make the situation of illegal copies worse than ever before. These societal conditions make it problematic to collect accurate data. Meanwhile, Yu (2002) maintains that this problem also has resulted in more difficulty among production companies to undertake longterm planning and to invite investors (p. 134-135).

The second limitation arises from the unclearness of terminology. This problem is related to the unclear concept about how much of digitalized production can be recognized as digital animation. This lack of a clear definition is confirmed by Y. S. Ahn:

> There are so many arguments about defining the concept of digital animation. The concept of digital animation appeared when the computer was introduced to the production process of cel animation. But, several animation experts have a different view because most—for instance, more than 60%—are manually done and only a small part is switched into the computer process. This type of animation was called 2D cel digital animation for a while. But, since the terminology is getting more complicated as time goes by and outputs are digitally released anyhow, most current animation works are simply called digital animation (personal communication, October 18, 2005).

Thus, the unclearness of the concept about digital animation may continue for the time being. The confusion that is pointed out most frequently is associated with the concepts of 2D digital and 2D+3D. For the most part, 2D digital and 2D+3D concepts are used together. For example, some call one animation as "2D digital," while others consider that animation as "2D+3D."

Because of this conceptual confusion, this research, except for some animations that make their positions clearly as 2D digital animation, follows the criterion that simply judges 2D as cel animation and both 2D+3D and 3D only as digital animation. Nonetheless, it is estimated that there are several 2D animation works being recognized as digital animation works.

Suggestions for Future Research

One of the fundamental purposes of this research is to deal with the digital animation industry comprehensively and then to analyze the transformation of this industry from a broader perspective. Therefore, this research addresses the industry and the policy of digital animation on the basis of the production process. Yet, there are several areas that are not dealt with, and these areas need to be examined as well.

One of these areas is distribution. As seen in Table 2, the distribution process of digital animation is excluded from the research for two reasons: (1) is that the distribution process is basically separated from the production process and (2) is that the distribution process can be dealt with not by production companies but by distribution companies. Future research, however, needs to explore the influence of the digitalization of animation through the distribution process. As mentioned above, digital animation is in a

transitional period and its advance into foreign markets still has not produced results significant enough to establish influence comparable to the Korean Wave. Therefore, the distribution side needs to be examined in the near future.

The second opportunity for future research deals with the production process of cultural globalization. This was not examined in this research for two reasons: (1) the main subject to examine is not the production process itself, but rather the content, and (2) the theoretical foundation of the cultural globalization area is directly related to neither political nor economic globalization. In order to analyze the production process from the perspective of cultural globalization, research needs to focus on the content of digital animation and has to be based on a different theoretical foundation, such as localization and cultural homogeneity/heterogeneity. Therefore, separate research that takes into account these distinctions should be carried out.

The third opportunity is related to audience. As already mentioned above, further research needs to look at this moment as the transitional period, since only a few years have passed since the advent of digital animation. Because of this timing, there has been little research that deals with audience responses or the effects of digital animation. Therefore, it would be useful to focus on the role of the audience separately.

Fourth, future research needs to deal with another format of digital animation, Flash animation. Unlike other countries, the Flash format of animation has become popularized rapidly in the last five years. Flash animation is worthy of attention because of its ability to link and to extend its business into other areas. Many commercialized animation works including advertising on the Internet are based on Flash animation. Thus, because Flash animation is closely connected to the other related industries such as the

character industry and the game industry, there is a need for the study of Flash animation from an economic perspective.

The fifth suggestion is for the undertaking of separate research on the copyrighting of digital animation. This issue is also underscored by B. M. Lee (personal communication, October 24, 2005). One finding of this research is that the role of nation-states suggests that its function clearly has changed, but it is difficult to judge this shift as active or passive. If digital animation is studied on the basis of copyrights, however, it is expected that the results about the role of nation-states will be totally different. In addition, because of the long history of Korean's black market and the newest concern caused by the information technology—P2P—future research needs to examine digital animation the perspective of intellectual property rights.

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APPENDIX A

DEFINITIONS OF TERMS

■**2D animation**: Two-dimensional animation. This format extends objects in two directions, that is, in terms of height and width.

■**3D animation**: Three-dimensional animation. A sense of depth is added in height and width, which are the basic factors of 2D animation. The 3D format creates a cubic effect and resembles reality.

■**2D+3D animation**: Animation in which two types of animation formats are combined, in this case animation that has a 3D background and 2D characters are combined.

■**Cel animation**: The animation that generally uses sheets of clear cels. After objects are drawn and painted objects on cels, they are photographed frame by frame.

■**Co-production**: More than two companies share tasks equally under contract.

■**Digital animation**: Animation whose production procedure is conducted using computers either partially or totally.

■**Digital cultural products**: Cultural products—e.g., films, television programs, art works, animation, music CDs—that are digitally produced.

■**Feature-length animation**: Animation that is produced for the purpose of release in theaters. Running time is usually over 60 minutes.

■**Flash (Web) animation**: Animation made by computer software, Flash, which was invented by Macromedia Inc.

■**GDP**: The total market value of all final goods and services produced in a country in a given year.

■**IMDB**: It is an online database (www.imdb.com) that provides information about individual films, television programs, direct-to-video product and videogames. According to the IDMB statistics (http://www.imdb.com/database_statistics), it has information of 485,506 titles as of January, 2006.

■**Intranet**: It is a private network that is contained within a company. Its main purpose is to share information and resources among employees. It enables employees to quickly find information relevant to their roles.

■**IPTV**: A method distributing television content over IP. IPTV allows people who are separated geographically to watch a movie together, while chatting and exchanging files simultaneously.

■**Korean Wave**: This social phenomenon appeared around the late 1990s in East Asia such as China, Japan, and Taiwans well as in some countries of Southeast Asia, such as Vietnam, Thailand and so on. Cultural products—e.g., television dramas, films—made in Korea are widely distributed and consumed by Asian people from these areas.

■**LCD:** Liquid Crystal Display is the technology used for displays in notebook and other smaller computers. It makes displays much thinner than cathode ray tube (CRT) technology that has been used for a long time.

■**Made-for-television animation**: Animation that is made for the purpose of broadcasting through television. Running time is generally between 25 and 30 minutes.

■**Original animation**: The animation for which the whole production procedure, from the production plan to production and distribution, is managed by the company that originally devised the animation.

■**Outsourcing**: This production type involves personnel from outside and letting them undertake parts of the production. This concept is mostly used by countries that give orders to other countries.

■**P2P**: An Internet network that allows a group of computer users with the same networking program to connect with each other and directly access content files—e.g., audio, video, data, etc.—from one another's hard drives.

■**RFID**: A technology that incorporates the use of electromagnetic or electrostatic coupling in the radio frequency portion of the electromagnetic spectrum to uniquely identify an object, animal, or person.

■**Subcontracting animation**: Animation in which parts of the production procedure is given to other companies/countries by contracts. In general, these companies/countries are in charge of specific production parts, such as drawing and painting. This practice is synonymous with "offshore animation." Countries that receive orders from other countries generally use this concept.

■**TFT**: It is a technology to produce LCD (Liquid Crystal Display).

■**USN**: Infrastructure network for realizing ubiquitous computing environment using sensor nodes

APPENDIX B

ABBREVIATIONS

- **ASEAN**: Association of Southeast Asian Nations
- **BcN**: Broadband convergence Network
- **CCTV**: Chinese Central Television
- **CEO**: Chief Executive Officer
- **CFCI**: Chuncheon Foundation for Culture Industry
- **CIQ**: Cultural Industries Quarter
- **DAB**: Digital Audio Broadcasting
- **DMB**: Digital Multimedia Broadcasting
- **EBS**: Korea Educational Broadcasting System
- **ETRI**: Electronics & Telecommunications Research Institute
- **EU**: European Union
- **FDI**: Foreign Direct Investment
- **G7**: Conference of Ministers and Governors of the Group of Seven
- **GDP**: Gross Domestic Product
- **GIMC**: Gangwon Information & Multimedia Corporation
- **HHC**: Hand Held Culture
- **HHH**: Hand Held Heaven
- **ICTs**: Information and Communication Technologies
- **IGO**: International Governmental Organizations
- **IMDB**: Internet Movie Database
- **IMF**: International Monetary Fund
- **IPTV**: Internet Protocol Television
- **IT**: Information Technology
- **KAPA**: Korea Animation Producers Association
- **KBC**: Korean Broadcasting Commission
- **KBI**: Korea Broadcasting Institute
- **KCTPI**: Korea Culture & Tourism Policy Institute
- **KIET**: Korea Institute for Industrial Economics & Trade
- **KIPA**: Korea IT Industry Promotion Agency
- **KISDI**: Korea Information Strategy Development Institute
- **KJCF**: Korea-Japan Cooperation Foundation
- **KOCCA**: Korea Culture & Contents Agency
- **KOFACE**: Korea Foundation for Asian Culture Exchange
- **KOFIC**: Korea Film Commission
- **KOSCAS**: Korean Society of Cartoon and Animation Studies
- **LCD**: Liquid Crystal Display
- **M&A**: Merger and Acquisition
- **MBC**: Munhwa Broadcasting Corporation
- **MCIE**: Ministry of Commerce, Industry & Energe
- **MCT**: Ministry of Culture & Tourism

- **MIC**: Ministry of Information & Communication
- **MNC**: Multi-National Corporation
- **MOFAT**: Ministry of Foreign Affairs & Trade
- **MOU**: Memorandum of Understanding
- **NAFTA**: North America Free Trade Agreement
- **NGO**: Non Governmental Organizations
- **NIC**: Newly Industrialized Countries
- **NIS**: Reduced-scale national Innovation System
- **OECD**: Organization for Economic Cooperation and Development
- **OJT**: On the Job Training
- **OSMU**: One Source Multi Use
- **OVA**: Original Video Animation
- **P2P**: Peer-To-Peer
- **PMI**: Perfect Multimedia Institute
- **RFID**: Radio Frequency Identification
- **SIPRO**: Seoul Industry Promotion Foundation
- **SMBA**: Small and Medium Business Administration
- **SMG**: Shanghai Media Group
- **SO**: System Organizer
- **TFT**: Thin Film Transistor
- **TIME**: Telecom-Information-Media-Entertainment
- **UNESCO**: United Nations Educational, Scientific and Cultural Organization
- **USN**: Ubiquitous Sensor Network
- **WTO**: World Trade Organization
- **WWW**: World Wide Web

APPENDIX C

LIST OF INTERVIEW RESPONDENTS

Name of Respondents	Position	Workplace	Interview Date
Ahn, Yu-sub	Head of Animation Division	GIMC	October 18, 2005
Choi, Jong-Il	CEO	Iconix	October 10, 2005
Han, Chang-Wan	Professor of the Department of Comics & Animation	Sejong University	October 17, 2005
Hong, Seong Ho	Director and CEO	Independence	October 13, 2005
Kim, Jeong-Kyu	Head of Planning & Management Division	GIMC	October 7, 2005
Kim, Moon Saeng	Director and CEO	Tin House	May 9, 2005
Kwon, Jae Woong	Director and CEO	Big Film	October 13, 2005
Lee, Byung-Min	Director of Policy Development & Analysis	KOCCA	October 24, 2005
Lee, Jeong-Min	Professor of the Department of Animation	Korean National University of Arts	October 19/26, 2005
Sul, Gee-Hwan	Executive Vice President of Training & Technology Development Division	KOCCA	November 7, 2005
You, Il	Head of Animation Business Division	GIMC	October 12, 2005
An anonym	X[29]	KOCCA	October 24, 2005

[29] Because this respondent requested anonymity, his position is not open to public.

APPENDIX D

CERTIFICATION OF APPROVAL FOR A PROJECT

INVOLVING HUMAN SUBJECTS (IRB)

TEMPLE UNIVERSITY, MAIN CAMPUS
PHILADELPHIA, PENNSYLVANIA, 19122

INSTITUTIONAL REVIEW BOARD (IRB)

CERTIFICATION OF APPROVAL FOR A PROJECT
INVOLVING HUMAN SUBJECTS

PROTOCOL NUMBER: 05-117 **APPROVED ON:** 6/7/2005

PRINCIPAL INVESTIGATOR: JAE-WOONG KWON

SCHOOL/COLLEGE: SCHOOL OF COMMUNICATIONS AND THEATER

DEPARTMENT: COMMUNICATION SCIENCES

SPONSOR: NONE

CATEGORY: Dissertation Research

ADVISOR: JOHN A. LENT

PROJECT TITLE:
THE DEVELOPMENT OF DIGITAL CULTURAL PRODUCTS IN THE AGE OF GLOBALIZATION: FOCUSING ON THE KOREAN DIGITALIZED ANIMATION INDUSTRY

In accordance with the policy of the Department of Health and Human Services on protection of human subjects in research, it is hereby certified that protocol number 05-117, having received preliminary review and approval by the department of COMMUNICATION SCIENCES, was subsequently reviewed by the Institutional Review Board in its present form and approved on 6/7/2005 with respect to the rights and welfare of the subjects involved; appropriateness and adequacy of the methods used to obtain informed consent; and risks to the individual and potential benefits of the project.

In conforming with the criteria set forth in the DHHS regulations for the protection of human research subjects, and in exercise of the power granted to the Committee, and subject to execution of the consent form(s), if required, and such other requirements as the Committee may have ordered, such orders, if any, being stated hereon or appended hereto.

* 6/1/2005(review date)

It is understood that it is the investigator's responsibility to notify the Committee immediately of any untoward results of this study to permit review of the matter. In such case, the investigator should call Richard Throm at 707-6787.

ZEBULON KENDRICK, Ph.D.
CHAIRMAN, IRB

TEMPLE UNIVERSITY
A Commonwealth University

School of Communications and Theater

Annenberg Hall (011-00)
2020 N. 13th Street
Philadelphia, Pennsylvania 19122-6090

Mass Media and Communication Program

Consent Form

Title: The Development of Digital Cultural Products in the Age of Globalization: Focusing on the Korean Digitalized Animation Industry

Jae-Woong Kwon
Doctoral Student
Mass Media and Communication
Temple University
jkwon@temple.edu
215-823-2631

My research aims to examine the development of digital cultural products and to examine whether digital cultural products exhibit characteristics of globalization. Towards this goal, this research chooses the Korean digital animation industry as the subject and scrutinizes the current status of the industry as well as government policy and supporting systems, strategies for advancing into the world market, and cultural features of Korean digital animation. This research will evaluate the importance and potential of Korean digital animation. Your input is valuable and of great important to the completion of this research.

Your participation in this research is absolutely on a voluntary basis. You may refuse to participate at any time without consequence or prejudice. After the interview, the transcript of the interview will be sent to you. Then, you can look at whether there exists incorrect information and can indicate parts of your opinions that you do not want to be seen. If you do not want to be identified by name, this research will preserve your anonymity when the result is reported, and your identification will not be told to anybody without your prior permission.

If you have any questions about the study or would like to see the result of the study, please e-mail me at jkwon@temple.edu or my academic advisor, Dr. John A. Lent, at jlent@temple.edu. Thank you so much for your help and time.

I understand that if I wish further information regarding my rights as a research subject, I may contact Richard Throm, coordinator at 215-707-8757.

Signing your name below indicates that you have read and understand the contents of this Consent Form and that you agree to take part in this study.

_____ _____

Participant's Signature Date

_____ _____

Investigator's Signature Date

TEMPLE UNIVERSITY
IRB (COMMITTEE B) APPROVAL
JUN 07 2005
VALID FOR NO MORE THAN ONE YEAR

TEMPLE UNIVERSITY
A Commonwealth University

School of Communications and Theater

Annenberg Hall (011-00)
2020 N. 13th Street
Philadelphia, Pennsylvania 19122-6090

Mass Media and Communication Program

Permission to Audiotape

Investigators' Name: Jae-Woong Kwon
Department: The School of Communication and Theater (Mass Media & Communication)
Project Title: The Development of Digital Cultural Products in the Age of Globalization: Focusing on the Korean Digitalized Animation Industry

Subject: _____ Date:
Log #:

I give _____ permission to audiotape me. This audiotape will be used only for the following purpose (s):

RESEARCH

This audiotape will be used as a part of a research project at Temple University. I have already given written consent for my participation in this research project. At no time will my name be used.

WHEN WILL I BE AUDIOTAPED?

I agree to be audiotaped during the time period:
_____to _____.

HOW LONG WILL THE TAPES BE USED?

Data will be stored for three (3) years after completion of the study.

WHAT IF I CHANGE MY MIND?

I understand that I can withdraw my permission at any time. Upon my request, the audiotape(s) will no longer be used.

OTHER

I understand that I will not be paid for being audiotaped or for the use of the audiotapes.

TEMPLE UNIVERSITY
A Commonwealth University

School of Communications and Theater

Annenberg Hall (011-00)
2020 N. 13th Street
Philadelphia, Pennsylvania 19122-6080

Mass Media and Communication Program

FOR FURTHER INFORMATION

If I want more information about the audiotape(s), or if I have questions or concerns at any time, I can contact:

Investigator's Name: Jae-Woong Kwon
Department: Mass Media and Communication
Institution: Temple University
Street Address: 2020 N. 13th Street

City: Philadelphia State: PA
Zip Code 19104 USA

Phone: Office 215-204-8348 Home 215-823-2631

This form will be placed in my records and a copy will be kept by the person(s) named above. A copy will be given to me.

Please print

Subject's Name: _____

Date: _____

Address: _____

_____

Phone: _____

Subject's Signature: _____

_____
Witness Signature Date

_____
Witness Signature Date

TEMPLE UNIVERSITY
IRB (COMMITTEE B) APPROVAL
JUN 07 2005
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