

Employment and Human Resource Development in the Content Industry: Fact-Finding Survey on the Animation Industry

Summary

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Objective of the Survey and Research

This research was undertaken as part of the research project, “Research on Employment Strategy of Our Country.” Japan is now entering a stage of economic maturation, and the focus of Japan’s industrial development is shifting from one of catching up with other advanced economies to one of developing our industries based on creation of values and culture. Against this backdrop, the creation of job opportunities is also expected to change from creation of a large number of jobs in particular industries to creation of a large number of small- to medium-scale job opportunities.

In this type of industrial development and employment creation, jobs are created through the process of contents creation and materialization of those contents as

products and services. The Japanese animation industry, which is the subject of this research, is based on the creation of content. It is rated highly internationally and has generated a substantial amount of added value through the accumulation of various kinds of related productive activities. It can, therefore, provide us with data that are also useful when examining human resource development and employment creation in other content-based industries. At the same time, because the Japanese animation industry is characterized by a high level of concentration of regional industrial agglomeration, it can also provide us with many implications on industrial and employment policies that are focused on “regional” developments.

In light of these industrial characteristics, we conducted, for this research, an interview survey on firms that are located in the agglomeration to understand the current state of and issues related to the labor conditions and human resource development in the animation industry. At the same time, we investigated on the support provided by local governments to the industry.

Outline of Research Results

1. Industrial trends and characteristics

(1) Scope and range

Because of the rise in the sales of the animation contents for television broadcast, movies, and video, helped by the spread of the VTR in the 1980s and of DVD devices in more recent years, the market size of the animation industry is estimated at around ¥200 billion as of 2003. In addition to the distribution of the animation contents for television, movies, and video, the industry is also closely related to other content-based industries, including comic books, video games, and live-action version of animated cartoons. Moreover, the sales from merchandising of animated cartoons and their characters are estimated at ¥2.2 trillion as of 1999. Therefore, the animation industry has a variegated ripple effect.

(2) Characteristics

- (1) The first characteristic is related to corporate division of labor, labor-intensity, and industrial agglomeration. The animation production process is segmented, each kind of work is highly specialized, and the industry is highly labor-intensive. There is a division of labor among firms in carrying out each stage of the production process, which requires regular meetings and communication for revisions among the firms. This has led to the formation of industrial agglomeration in areas where major production companies are located. In the Tokyo metropolis, where about 90 percent of all animation firms in Japan are located, there are large agglomeration in Nerima City and Suginami City in the western part of the metropolis.
- (2) The second characteristic is related to the changes brought about by globalization and digitization in recent years. Since the end of the 1990s, digitization of the production process has been promoted using computers for the purpose of cost reduction and increased efficiency in the production process. As a result, cel coloring and analog photographing technology became obsolete. At the same time, the low-tech processes of animation, coloring, and inspection are commissioned overseas to South Korea, China, and other Asian countries. As a result, domestic demand for these processes is diminishing. These changes have given rise to the issue of technology conversion of existing human resources and have an impact on the development of future generation of animators (i.e. the creators of original drawings and animation).

2. Survey method and subjects

In this research, we collected reference materials and conducted an interview survey, focusing mainly on the issue of human resources in the animation industry. For the interview survey, we asked the cooperation of animation production firms located either in Suginami City or Nerima City, in which one third of all Japanese animation production firms are concentrated, and vocational colleges in the Tokyo metropolis that supply human resources to the animation production firms. (We contacted all firms and colleges that were listed in telephone books and that we could reach.) The list of firms and colleges that agreed to cooperate in the survey and the specific outline of the survey are shown below.

(1) Subjects

- (1) Animation production firms: 15 firms (9 in Suginami City and 6 in Nerima City)
(Three firms in planning and production, four in production in general, and eight animation studios)
- (2) Educational institutions: four schools (three vocational colleges and one training center attached to a firm)
- (3) Local governments and other organizations: three organizations (Suginami City Office (animation and new industry section), Nerima City (commerce and tourism section), and the Association of Japanese Animators)
- (4) Three other persons: trainees who completed the human resource development program in animation, "Suginami Anime Takumi Juku."

(2) Research period: August to November 2004

(3) Main questions

- (1) Animation production firms: (a) corporate outline (year of establishment and history, capital, business standing, past works, and business relationship); (b) recruitment and development of human resources (size and composition of the workforce, labor conditions, labor turnover, recruitment, education and training, careers, and excesses and deficiencies); (c) future outlook and requests on the government.
- (2) Educational institutions: (a) school outline (year of establishment and history, educational programs); (b) students and their employment (trends of students, teaching staff, and trends of employment); (c) measures for increasing the

employment rate and future outlook (qualifications, internships, and requests on the industry and the government).

- (3) Local governments: (a) history of supporting the animation industry and description of policies; (b) collaboration with the industry; (c) future outlook.
- (4) Trainees who completed the human resource development program: (a) how they got to participate in the program; (b) description of work after completing the program; (c) future career outlook.

3. Summary of survey results

(1) The current state of and challenges facing production firms

Corporate outline and labor conditions

- (1) The subjects of the survey can be broadly categorized into three groups: the “original contractors” who have capital over ¥10 million and who carry out planning and production; medium-sized production firms subcontracted by the original contractors to carry out production work in general (gross contracting); and small- and medium-sized specialist studios subcontracted to perform work in each of the production processes.
- (2) With respect to the number of employees and employment patterns, it was difficult to clearly differentiate employment patterns. Generally, the number of employees was less than 50. There were only a few cases of employment of full-time regular employees and employees on limited-term contracts. Many of the animators, background artists, and photographers were non-employed workers working on contracts. Many firms had secured their services by providing them with place to work and capital. In terms of educational background, university graduates were responsible for production management, copyright management, etc., and graduates of vocational colleges were responsible for drawing, backgrounds, photographing, etc. (there were also some graduates of art colleges who did background drawings). For the latter, many of them were youths in their 20s.
- (3) With respect to labor conditions, because animation production is carried out within a set delivery schedule and with each stage of the production process closely linked with each other, those involved in production management, drawing, and photographing (except full-time regular employees in indirect management divisions who work regular hours) worked long hours of around 12 hours a day, or 50 to 70 hours a week. In production management departments that employ a large number of employees, the salaries were fixed. In some cases of large firms,

these employees earned an annual income of ¥6 million to ¥8 million and over; and in small- and medium-sized firms, the employees earned an annual income of ¥2 million to ¥3 million or more. On the other hand, for creators of drawings, backgrounds, etc., who work mainly on contracts, all firms except one that paid fixed wages adopted the piece-rate system (with or without minimum guarantee), partly because the studios had signed piece-rate contracts with the original contractors. The unit price was the lowest for animation, which was mostly done by new recruits, at ¥100 to ¥200 per sheet. Key animators were in charge of original drawings at around ¥3,000 per sheet and background drawings at ¥2,000 to ¥3,000 per sheet. In terms of monthly pay, those working on animation could earn ¥50,000 to ¥100,000, those doing original drawings and finishing, around ¥150,000, and those in charge of background drawings, ¥200,000 to ¥300,000 (the last case was fixed pay). As we shall see later, the pay was below appropriate levels primarily because the production cost paid by broadcasting stations and other producers to the original contractors was low.

Securing and developing human resources

- (1) With respect to recruitment and training, university graduates are periodically recruited mainly by large production firms as full-time regular employees or limited-term contract employees in production departments to be in charge of “progress of production.” Graduates of vocational colleges are also periodically recruited as animators and background artists (mainly on contracts). They are also recruited year round whenever vacancies arise. Newly recruited artists go through a month to three months of OJT under the supervision of experienced artists. While some large- and middle-sized firms provide a minimum guarantee pay of around ¥50,000 to ¥100,000 a month, smaller firms adopt the piece-rate system. The living, therefore, is not easy for new recruits. For many firms, the turnover rate after a year of recruitment of a new artist is from 50 to 80 percent. Experienced artists in their 40s and above, in either production or drawing, tend either to become independent or, if they cannot increase their productivity, leave the industry.
- (2) On careers and recent changes, animators develop their careers through a course that starts with animation then moves on to inspection of animation, original drawings, and supervision of drawings. Background artists similarly develop their careers starting with background drawings and moving on to artistic direction. At many firms, animators, background artists, and those in the

production department take about three years to become full-fledged. Some of them will develop their skills in rendering and storyboarding before becoming directors. With reduction in the animation process resulting from overseas consignment, efforts are being made, for instance, to train artists of original drawings through training in making fair copies of original drawings. As a result of a shift to digital production that began at the end of the 1990s, many skilled photographers were unable to make the conversion to digital technology and left the workplace because of decreased productivity. The digitization of coloring and other work in the finishing process increased efficiency of the process but resulted in over-employment.

Issues and challenges

- (1) With respect to structural problems of the entire industry, all firms surveyed pointed out (i) the subcontractor relation with advertising agencies, broadcast stations, and other distributors as well as production costs that are below the appropriate price; (ii) monopoly on copyrights by distributors (or by large production firms); and (iii) nonexistence of a practice for concluding agreements. As problems that arise mainly from shortage of production costs, the firms surveyed mentioned (iv) the burden of investment in equipment required for digitization and (v) low wages and high turnover of new recruits that inhibit the development of competent artists of original drawings, who have a significant bearing on the quality of works.
- (2) On the emergence of South Korean, Chinese, and other foreign firms, the firms surveyed were divided in their opinions. (i) Some firms were optimistic from a short-term viewpoint and considered the effect of overseas firms to be supplementary as only workloads that are beyond the domestic capacity are being consigned abroad. (ii) Other firms were pessimistic and take a medium- to long viewpoint considering that competent domestic artists of original drawings will no longer be developed, overseas firms will develop their competence for production, and Japanese firms will be left only with pre-production process of planning and rendering.
- (3) On educational institutions, many firms considered graduates of vocational colleges as not technically ready to perform work without further training and as lacking in communication skills. Some firms were of the opinion that graduates of vocational colleges should start as apprentices within firms. Many were also of the view that to train competent animators, they should be trained at four-year

universities, such as at the art departments of national universities.

- (4) With respect to how the industry should address issues, there was an opinion that, firstly, production firms should have the willingness to address various issues of the industry. Many firms also felt that the interfirm network should be built and strengthened to respond collectively to existing structural problems and to changes brought about by digitization, etc. In fact, the functions of the industrial association have been reinforced in recent years: the members are carrying out joint research on digitization, and arrangements with major online auctions sites on elimination of piracy as well as with television networks on copyrights have yielded certain results. Therefore, there is still ample room for the industry to make improvements. It was pointed out, however, that there was a lack of leaders who can bring the firms together. There is a need for the existing industry association to make an effort in training leaders.
- (5) On assistance provided by the government, there was a wide range of views from firms that required no assistance from the government to firms that looked to the government to be their clients, but 10 out of 15 firms said some form of assistance was necessary. Firstly, support was needed to stabilize corporate management, to correct the subcontract relation, and to present new business models (financing schemes based on works of animation, expertise in obtaining and managing copyrights) to address structural problems. Secondly, support in digitization (financing for investment in equipment and preparation of infrastructures) and in human resource development (grants for human resource development, establishment and expansion of national universities and other training centers) was mentioned as a measure for promoting Japan's animation industry in the future. Lastly, proposals were made to create the "Anime Village," in which training centers, museums, and studios are located, as a measure for promoting urban industrial agglomeration.

(2) The current state of and challenges facing educational institutions

Current state of educational institutions

- (1) The largest differences among educational institutions were found most notably in their relation with production firms and in their entrance screening. When four schools of our survey were compared regarding curriculums, facilities, teaching staff, and internships, it was found that the training center attached to a firm had the support of the firm in every way, that the employment rate of its graduates in the animation industry was maintained at 100 percent, and that 75

percent of them remained in the industry after graduation. At this training center, applicants to the center's two-year courses had to take entrance exams on composition, drawing, animation, and layout according to the courses they apply for. The other three schools did not administer any practical exams. One school had an internship program, and another had teaching staff that comprised solely of active animators.

- (2) With respect to efforts made in recent years, all schools had introduced curriculums and facilities that were adapted to digitization. There were differences in the policy on human resource development. The training school attached to a firm established a one-year graduate school for students who completed the two-year program to further train students in advanced digital technology. On the other hand, an old-line vocational college was examining the possibility of introducing, with the cooperation of firms, an apprentice program for students who were not yet employed.

Challenges

- (1) The first challenge is coordination between firms and educational institutions. With the exception of the training center attached to a firm, all three vocational colleges felt that "there was a distance between vocational colleges and firms." Production firms do not have the elbowroom for educating new recruits, but considers vocational college graduates as lacking in technical skills. Vocational colleges, on the other hand, feel there is a limit to training students to full readiness through off-the-job-training alone, and hope that firms become more open to training new recruits. Therefore, the expectations of both sides are not met. With the exception of the old-line vocational college mentioned above, no other vocational colleges have succeeded in introducing an internship program. There are, however, new developments. A vocational college that will establish an animation course this year will collaborate with a firm to jointly develop human resources. These developments indicate that there is a need for industry-college collaboration in human resource development. As indicated in our case study, the government needs to play the role of the coordinator.
- (2) The second challenge relates to the question of whether to screen applicants. As was shown in our survey of firms, some firms were of the view that applicants to vocational colleges should be screened. In fact, at the training center attached to a firm, applicants were screened at the time of entrance and education was provided to a small number of selected students. As a result, the employment

rate as well as the retention of these students in the animation industry was maintained at a high level. In interviews with the three vocational colleges, however, many were negative about introducing screening because of possibility of students to develop their skills after entrance and of a chance, for instance, to transfer to courses in computer graphics or production management if a student was found to be not adept at drawing. At present, vocational colleges also play a role of allowing their students to look for occupations that are suited to them. Therefore, courses should be designed in accordance with different training policies, for instance, by organizing classes by students' abilities and establishing "graduate schools" for students to enroll in after completing their regular courses. These measures should be examined.

(3) The current state of and challenges related to support provided by various sectors

Support of local governments

With regard to the measures adopted by the local governments in the animation industrial agglomeration areas, Suginami City and Nerima City both saw the possibility of the animation industry as a "local industry" and began, during the 2000s, to examine and implement measures for collaborating with and supporting the animation industry. As the first step, both cities decided to organize an annual animation festival to publicize the industry to citizens and firms. As the second step, the cities supported the establishment of regional interfirm conferences. The animation conference was established in Suginami City and Nerima City in 2001 and 2004, respectively. The conferences promote exchange of information among firms and the local governments, participation in animation festivals, and intercompany collaborations in the production of original works of animation. In Suginami City, which had made its policy clear from the beginning to promote the animation industry as a local industry, discussions were being made on preparing the industrial infrastructures for digitization, a special department was established within the city office, an animation museum was established and further expanded, and a six-month internship program ("*takumi-juku*") was implemented. Nerima City was also considering similar measures.

Support by the government and others

- (1) On the support provided by the government, the basic understanding that the content business is strategically important both with respect to economy and culture was indicated in the government's Intellectual Property Strategic

Program, and 12-point strategies, which included measures for providing assistance for the modernization and rationalization of the animation industry and reinforcing human resource development, were set down in the program. The Ministry of Economy, Trade and Industry is also taking measures for assisting the industrial association, drawing up and spreading model contracts, and introducing content finance. The Agency for Cultural Affairs has a policy for promoting media art. Therefore, measures are being considered and implemented from both aspects of economy and culture.

- (2) With respect to assistance provided by local governments (excluding Sugunami City and Nerima City), the Tokyo metropolis, which considers the animation industry as a local industry, was examining the possibility of establishing industrial promotion centers and developing tourist routes. It also organizes Tokyo international animation fair. Local governments in other animation industrial agglomeration areas are also implementing measures for organization of animation festivals and establishment of museums. Gifu Prefecture and Saga Prefecture, which did not have an industrial agglomeration before, have implemented a policy of promoting the digital content industry.

4. Policy implications

From our survey on the animation industry, the following policy response is considered important with regard to employment creation and human resource development in industries based on creation of culture (value):

- (1) Industries based on creation of value (culture) should be regarded positively, and appropriate assistance should be provided to such industries by, for instance, publicly bearing or mitigating risks associated with production.
- (2) Support should be provided to talent (directors, etc.) capable of innovative value creation and to training of secondary value creators (producers, etc.).
- (3) At the same time as providing assistance to existing vocational skills education, education designed to discover “talent” should be promoted at universities.
- (4) Support should be provided for technological conversion in response to digitization and IT.
- (5) As one of the measures for distributing added value generated by content, the pricing power of a network of production firms and educational institutions that train animators should be strengthened. In this case, a certain degree of backup by the government should also be considered.
- (6) The relation among various stakeholders with respect to copyrights should be

reviewed and clarified in contracts. Support should also be provided to train experts on intellectual property.

- (7) Future employment policies should be developed by taking into consideration a wide range of workers. Consideration should be made on applying, in whole or in part, employees' systems on those other than employees depending on how their work is arranged.
- (8) There is a limit to the support that can be provided by local governments to the regional industrial agglomeration. For a wider institutional support, prefectures and the central government are expected to play a role.
- (9) It is important that adjustment is made in the working environment in light of the future labor supply structure that will include senior citizens and middle-aged women.

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