

Activating the Nishijin designing industry

Toshio Mitsuhashi , Ph.D.Professor
Faculty of Human Environment , Kyoto Prefectural University
Kazuhiko Kashima , Director
Nishijin Textile Design Pattern Society
Milena Metalkova-Markova, Ph.D.
Research Associate at Kyoto Institute of Technology

Keywords: Nishijin designing industry, Design center, Internet

Abstract

The Nishijin designing industry, the design supplier for Nishijin textiles, has led traditional industries in Japan by digital techniques for image processing. In recent years, however, a decrease in sales due to a slump in the Japanese clothing industry has jeopardized the industry's survival. This study investigates the industry's future plan, which includes using Internet and establishing a design center.

The results of a survey of union members indicated a need for:

1. Creating new designs that attract the youth.(71.9%)
2. Establishing a design center to activate the industry.(47.3%)
3. Advertising Nishijin designs worldwide through Internet.(43.8%)
4. Promoting Nishijin products for non-traditional uses.(47.3%)
5. Cooperating between manufacturers and designers.(57.8%)

An ideal design center should:

1. Stimulate designers with passive attitudes to work on their original designs.
2. Recognize market needs to develop new products accordingly.
3. Organize union activities such as design competitions.
4. Protect the intellectual property rights of Nishijin designs.
5. Encourage union members to exchange design data and business information.

Taking the above into account, the outline of an ideal design center promoting information exchange through Internet is proposed.

1. The purpose of the research

1.1. Transmitting to the world Nishijin's pattern technique as "Japan's culture"

The Nishijin pattern industry, which has traditionally had the role of design supplier for Nishijin textiles, has developed mainly in the field of Japanese clothing. Throughout its long history, a large amount of knowledge about this top-level technique has been gathered. However, the recent depression of the Japanese clothing industry brought about a precipitous decline in the number of orders received by our industrial circle, resulting in a strong blow to the companies affiliated with the present union. In addition, this has caused difficulties in the management of the union and the preservation and succession of techniques. Having this background information, the objective of the present project is a survey study intended to quickly communicate to the world's design market the idea of "Nishijin as a design of Japan." This idea is possible by merging the traditional pattern technique developed since the birth of Nishijin and subsequently handed down and the recently developed highly technical image-processing capability. We believe that the pattern-designing technique of Nishijin is the most advanced technique in the world, with a potential to become a design-supplying source for new fields as well as the textile field by the efforts of both the creators and users of image processing. In addition, Nishijin could become the opinion leader in these fields.

1.2. Creating the information network

The idea for the creation of the union information network of the present study includes the establishment of a "Design Center" for the central management of design created by union members in the union as well as the creation of a database in order to transmit the design.

In addition, the design center could have the function of a window to receive inquiries and orders of domestic and foreign origin. We are convinced that the present project will provide a

business breakthrough for the activation of our exclusive industrial circle by taking the framework of a "passive" form of the Nishijin's industry, where production follows orders, one step further and expanding its market to the world. Moreover, we are confident that the activation of the present industrial circle will contribute greatly to the area of Nishijin.

2. History and actual situation of the union

2.1. History of the union

The "Nishijin Pattern Association" was established 100 years ago, in 1899. Before that, according to the pattern association's records (letters by the head of the union in 1887), an organization called "Texture Pattern Worker's Union" was in existence.

In the post-war year of 1951, there was a growing tendency of revival in spite of a number of internal problems. This led to a memorial meeting with 24 participants and, in turn, to a revival of the new "Nishijin Pattern Association." The Nishijin production center finally became stable and showed more signs of activity than in pre-war years. The business development and activity of the association expanded in many directions. However, because of its volunteer status, the association felt limited in handling the increasing number of members year after year and the digitization of the pattern. There was a demand for legalizing the association. In response to this, the association made a new start in 1976 as the "Joint Union for Nishijin Pattern Association" by obtaining the agreement of a related organization under the supervision of Kyoto prefecture.

2.2. Current situations of the union

After 1975, technical innovations through electronics have been taking place at an increasing pace. The influence of technical innovations was strong enough to change our industrial circle as well. The computerization of the pattern-creating process forced the industrial circle to reorganize its structure, presenting a situation akin to the "industrial revolution."

The union quickly started to delve into counter-measures for the situation. To this end, the union mastered a new system's theory, held technical training sessions and inspection meetings at a manufacturing plant, and prioritized the development of a project to foster the knowledge of electronics among the members of the union. Due to the fast response, the union overcame unstable elements expected at the outset, and the union members were able to create a new pattern-creating system suitable for their environment.

3. Trend of computerization

3.1. Toward the age of the Internet

The number of Internet users in Japan exceeded 10 million in 1997 and is expected to have spread to approximately 40% of households by the year 2005, according to a communication bulletin published in 1998. Under such circumstances, the extent of industries related to the Internet is wide, including communication links, information providers, software, terminal devices, and infrastructure. Including the computerization of companies and electronic trading, the extent of the market is expected reach all industries and people.

3.2. Kyoto digital archive

The City of Kyoto and the Kyoto Chamber of Commerce and Industry recently established the "Kyoto Digital Archive Promotion Organism." This organism has just started by integrating industry, government, and academy with the awareness that "it may be a success or not, but if we do not start right now, we will be outdated."

A "digital archive" is a mechanism where tangible and intangible assets such as traditional industry and cultural assets are accumulated by digital technology and applied to various fields such as industry and culture.

The Kyoto Digital Archive Promotion Organism digitizes the assets of designs by Kyoto's traditional industry, applies the data to support pilot projects aiming at developing "products that use traditional assets," and attempts to create an environment for the proper use of intellectual property rights.

The following items describe the objectives of the Kyoto Digital Archive Promotion Organism:

- 1) The establishment of a support system, including the technical support of local business owners (traditional industrial business owners) to promote the digital archive of Kyoto;
- 2) The creation of a new industry in Kyoto by starting a joint project promoted both by local business owners and companies who have cutting-edge technology;
- 3) The study of various problems associated with "intellectual property rights" caused by the digitization of design..

3.3. Need for the computerization of the union

To overcome the difficulty presented by today's situation, the Joint Union for the Nishijin Pattern Association considers that it is important to promote the computerization of the union. Moreover, it considers that this union is capable of promoting computerization earlier than any other industry in Japan. We also think the union would benefit from computerization because of its characteristics.

The main points can be summarized as follows:

- * The present union was the first to digitize the traditional techniques of Nishijin textiles and holds several thousand patterns from the Muromachi era as a traditional Nishijin pattern database;

- * Because of the depression of today's Nishijin industry, the situation surrounding the industry is so difficult that the system employed by wholesale stores and machine shops makes it impossible to maintain business. The seriousness of the depression clearly indicates that a passive attitude will not be help maintain the Nishijin pattern industrial circle;

- * We consider that it is a golden opportunity for the Nishijin pattern industrial circle to take an initiative to develop original patterns and designs and create a production system that is directly linked with the market;

- * In this sense, the above-mentioned computerization and support of information for small and medium enterprises and the activity of reviving our industry's traditional digital information in this computerized society have a great potential for the future;

- * In order to accomplish these goals, we consider that it is necessary to create high-quality information in a digitized form to be transmitted to the world and to have a design center as a new "core;"

- * The design center has to be capable to receive and transmit information in order to grasp the demands of the Nishijin pattern market and create designs that can meet the demands of the market;

- * We expect the design center to have the following functions: information transmission, information management, and administration management in order to reinforce the strength of the present union, which has the characteristics of a small enterprise through the information network;

- * In addition, with this new "core" design center, it becomes possible for the union members to exchange their ideas, facilitate communication, promote mutual friendship, and further strengthen the solidarity of the union members.

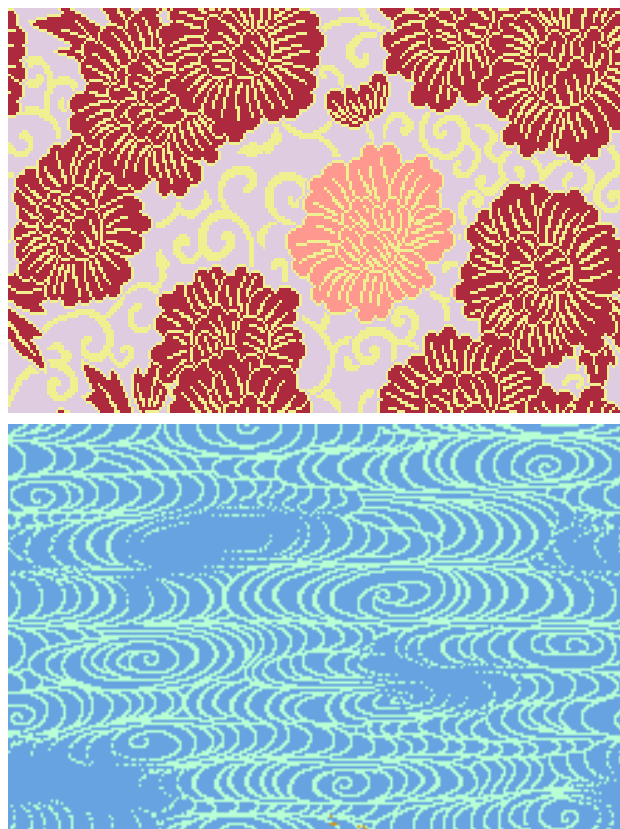


Figure 1: Nishijin Pattern Design

4. The research of questionnaires

4.1. Outline of questionnaires

The Nishijin's managers, successors and employees answered questionnaires about a conception in the future that include information techniques for image processing of the Nishijin Design Doshikai. The research was done by the member of the Nishijin Design Doshikai, 88 people. Time of research was 1998, November 6 -November 16. The research were carried out to member of the Nishijin Design Doshikai, 56 people of managers, 12 people of successors and 20 people of employees. Contents of questionnaires are as follows.

- 1) A expectation or a demand for role of the Nishijin Design Doshikai at the present condition.
- 2) New movement or attempt of works at the office.
- 3) A view about design in the future.
- 4) A view about establishing design center of the association.
- 5) A function of the association which have design center.
- 6) Application of digital pattern design.
- 7) Using of circumstances or desire about Internet.
- 8) Needs for Internet.
- 9) A posture of designers.
- 10) About a talent.

4.2. The result of questionnaires

About a future plan involved with the promoted information of the Nishijin Design Doshikai, Internet and design center, total results of questionnaires which were collected. Moreover, from total answers for each questions, I interpreted about intention of employees and the general condition of a office.

1) what do you think about future design?(%)

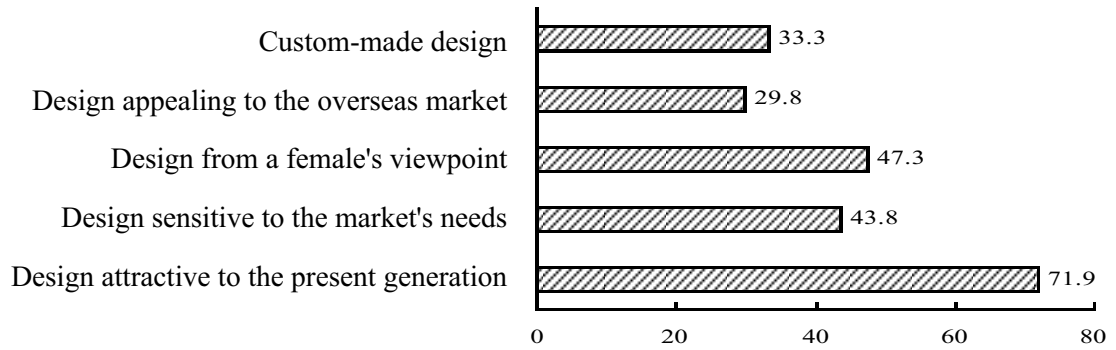


Figure 2: About future design

* For necessity of new design which is liked by a modern (71.9%). It shows that making of new design is needed strongly by successors.

* For design which men made before, nearly a half of people begin to think that it's necessary to take participation of women (47.3%).

* The understanding of the necessity to ascertain a movement of a market at all times (43.8%) and necessity of market sense for design is showed.

2) What do you think about design center of association?(%)

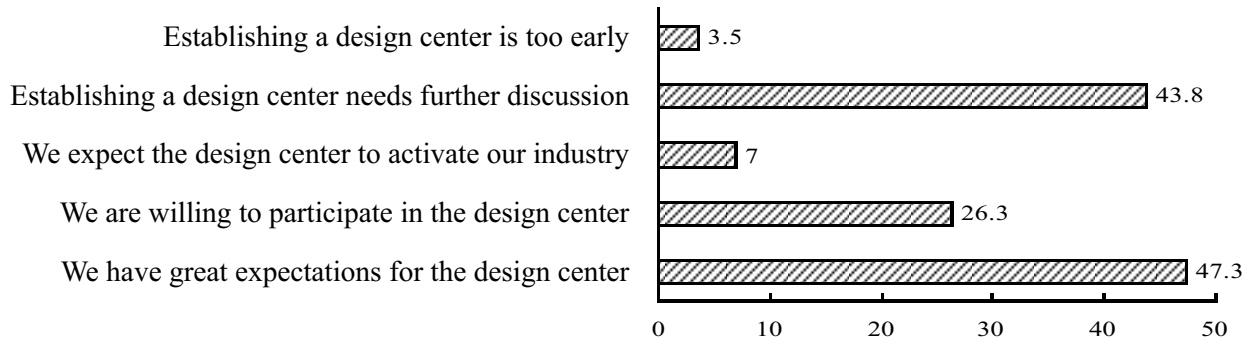


Figure 3 About design center of association

* Nearly a half of them expect activation of association by design center (47.3%).

* About positive participation into design center (26.3%), especially owner express strongly about it (35.4%).

* In the other side, they think they'll examine carefully. Subjects are establishment of design center image in an association and joint of all of members of an association.

3)What kind of functions do you expect if an association has a design center?(%)

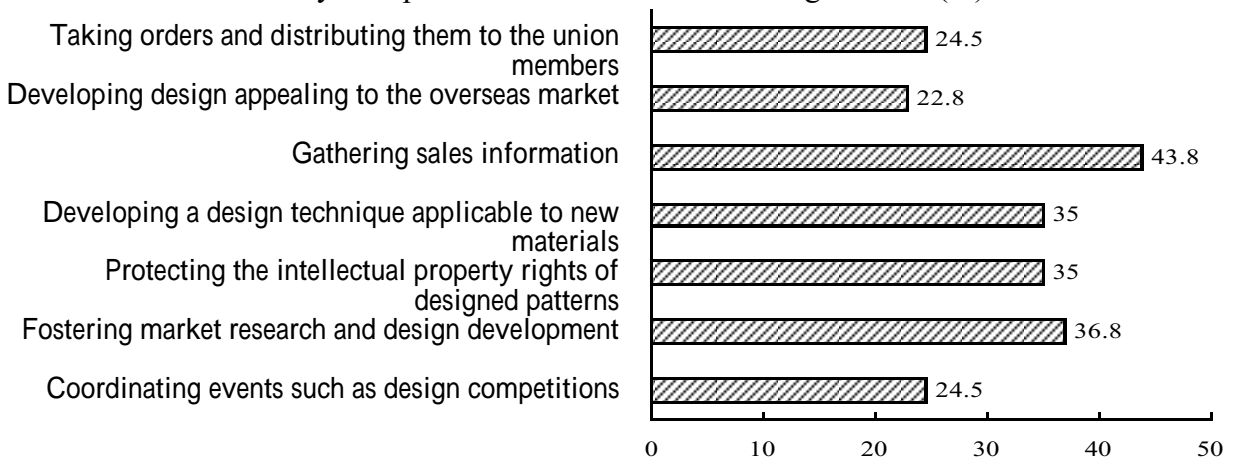


Figure 4: Function of design center

- * By an antenna shop function, they can develop new products and sell them. They think that this function will be strengthened more by Internet shops (43.8%).
- * Especially owners (51.6%) desire new market investigation and development of design (36.8%) as functions of design center strongly.
- * Also, the administrative function (35.0%) such as the idea of design is expected as the function of design center.

4) The way of using Internet (%)

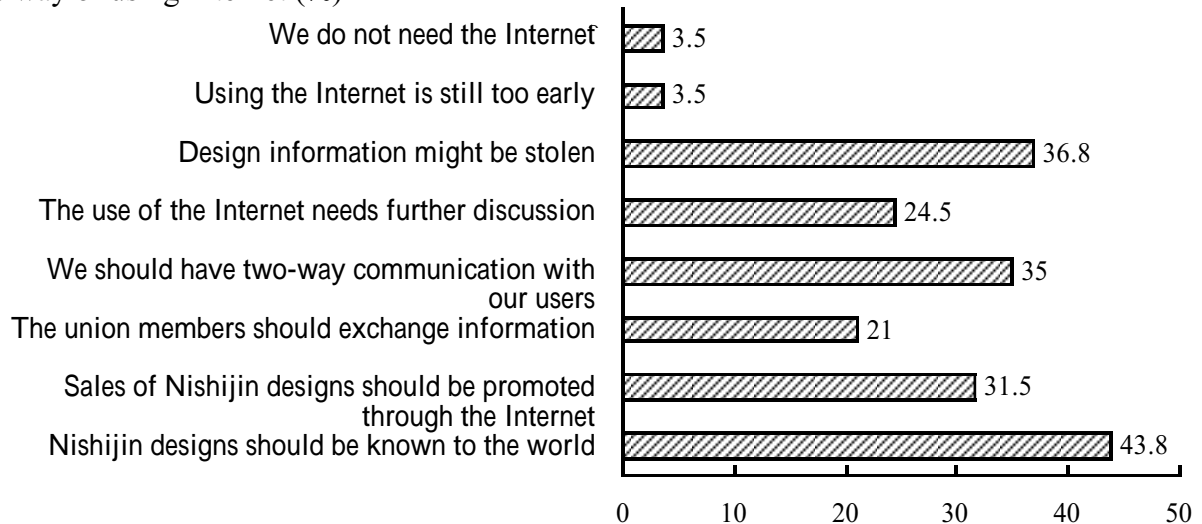


Figure 5: Way of using Internet

- * It is most expected to dispatch to whole world by using Internet (43.8%)
- * However, from the different way of view, dispatching to whole world by Internet (manager 51.6%), mutual communication (successor 55.5%). The results show the differences of desire or interests toward Internet.
- * The sense of desire toward the possibility of Internet business such as mutual communication (35.0%) and Internet negotiation (31.5%) exceed 30%.

5) The way of basic attitude what make should engage.(%)

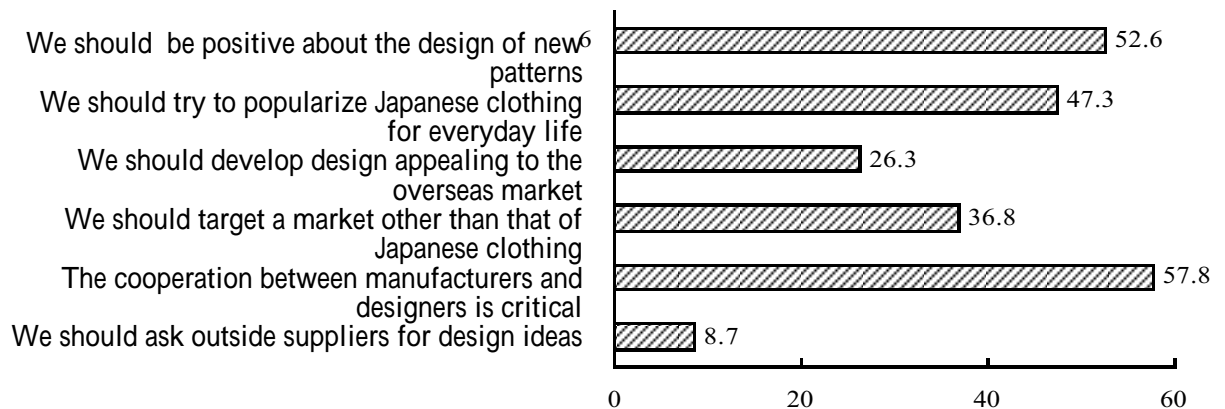


Figure 6: About basic attitude

- * It's desired strongly that both designers and makers cooperate each other in Nishijin organization (57.8%).
- * Moreover, it is desired strongly that getting rid of former passive attitude (52.6%).
- * It's requested that they wear Japanese clothes and kimono (47.3%). It shows the hard feelings toward Japanese style.
- * However, on the other hand, the opinion that they should get rid of Japanese style and improve new merchandise account for more than a third of all (36.78%).
- * The design should be taken from outside (8.7%). It shows that the way of requiring the design from outside into inside. It is suggested strongly.

6) What should we do to inform the value of Nishijin to many people?(%)

- * The merchandise which is the idea of design except Japanese style should be developed (47.3%).
- * However, from depends on the position, there are some unique differences among managers, suc-

cessors and workers that managers (development except Japanese style 58.0%), successors (the design for young people, using the merchandise which is the idea of design 66.6%) and workers (the design for young people 47.0%).

* Cooperation with universities and specialists and improving the design toward whole world account for a third of all.

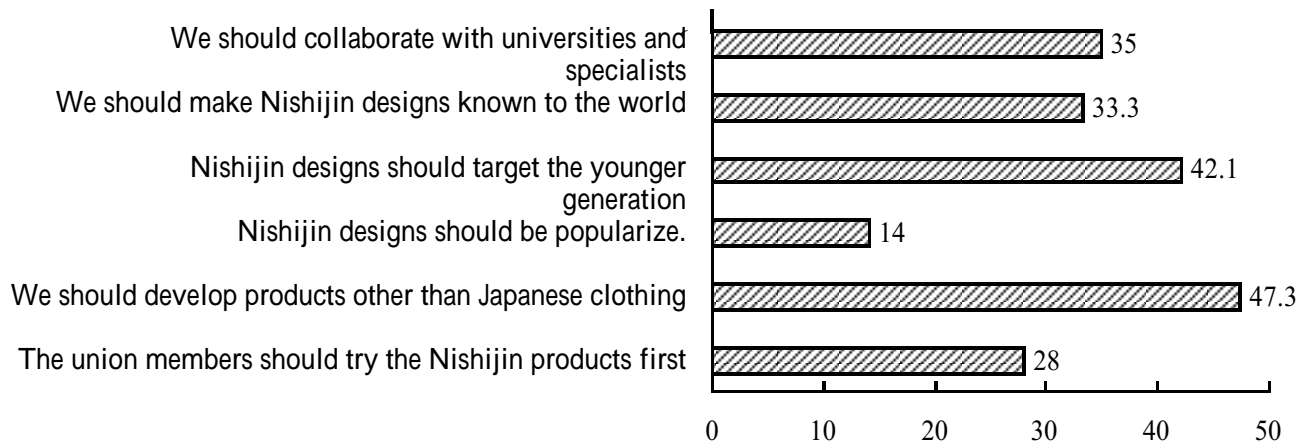


Figure 7: What should we do to inform

5.Establishment of Nishijin information network

We examined it about the way that the information network of Nishijin association was established, and set up that frame work.

Each element of Nishijin information network is shown, and it gives the outline about the various services that the information network functions in the following.

5.1. Functional strengthening of design center

"Nishijin design center which became "the core" of the information network was established like the plan of Nishijin association information network of the figure 111.

That function is to support the promotion, advertisement of the union activities and education. The specialists related to the information and the development of software are necessary to strengthen the function of the design center. Then, it must send good information with keeping in touch with the specialist of the homepage design.

Furthermore, it is necessary to keep in touch with consultant that the special information of textile design and fashion design is provided for the member of an association, too.

5.2. The reinforcement of the creative activities

Not only a pattern designing but also Nishijin association must do work actively like the creative art which was designer's work till now, too. In other words, it must place the activities of Nishijin association on the special area which the high value added which is "original design" is given to. And, an introduction of new sensitivity corresponding to a market needs is indispensable to this association.

Therefore, it is asked to provide a chance to participate Nishijin work toward designers of the outside and university students of the art , professional school students of textile design .

It is necessary to pour "the fresh blood of Nishijin" through the creative activity and the interchange with such outside , too.

5.3. A variety service between the center and members of the association

A variety service such as "an intellectual ownership control service""pattern data service" "business management service" "business world information service" "design technological service" "talented people education service" "Intellectual ownership service" are done between the design center and the member of Nishijin association through the Internet.

oreover, to catch a response of the market and to grasp a market needs sensitively , "the antenna shop" function becomes necessary in the design center, too. The market information of this antenna shop is given to the member of an association through Nishijin network.

5.4. From the Nishijin design center to the world

The foundation which Nishijin design information is sent to is established by the connection of the above "core" "contact" "create" "information" "consultant".When that base is established, Nishijin

network is united with the world market . Nishijin information can be concluded with the market such as a production, building, apparel, interior, and art, a wholesale store, a small stand market, the general user, a hotel, a department store, an office and an event more.
 So, it communicates between the market and the Nishijin design center the variety services such as "order control service for the manufacturer" "user consultation service" "a small stand information service" "Nishijin homepage service" "Internet service" .
 Really, it means that "the new tradition of Nishijin" is sent toward the world.

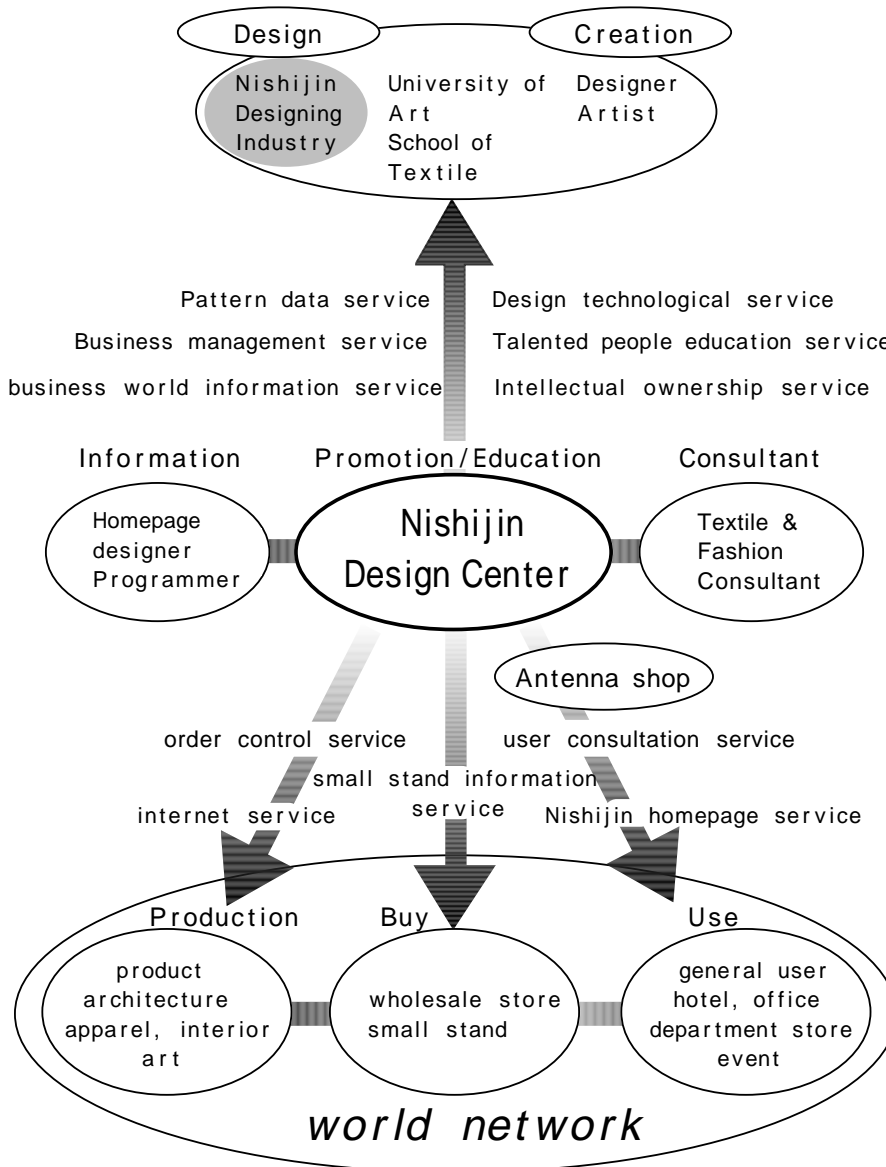


Figure 8: Establishment of Nishijin Information Network

6. Conclusion - Revival and new creation of the Nishijin pattern culture

The history of Nishijin textiles, which is a traditional industrial art industry, has been a history of challenge exemplified by confronting many difficulties and disasters throughout time and overcoming them through a naturally strong spirit, the introduction of state-of-the-art technologies and their development, and, in particular, the solidarity of the union.
 On the other hand, we can also point out "design capability," which is one of the talents required by the Nishijin Pattern Association. This is clearly expressed in the statement of one of our predecessors: "Our work starts with drawing a picture. I would not mind even if you practiced so intently that this practice room turned black with ink (Hikojiro Mizuno, Director of the Nishijin Design Pattern Paper Industry Joint Union, 1951).
 This project's ideas of "linking to the Internet" and "creating a design center" are the basis for activat-

ing the union and will lead to the activation of Nishijin industrial circle based on "the state-of-the-art technology" and "improvement of design capability." Moreover, it resembles the situation faced by our predecessors, who overcame difficulties years ago.

We believe that the survey study of the present project manages to convey the ways in which the difficulty can be overcome by promoting computerization and the use of the Internet and creating a design center.

By pushing forward step by step, we are convinced that steady progress is necessary in the following areas:

- * the solidarity and union of the industrial circle with the design center as a "core;"
- * the promotion of "manufacturing," where the manufacturer and the user can see each other through an information network;
- * the establishment of "new pride of Nishijin" and "identity of Nishijin patterns and designs" by information transmission; and
- * the revival and new creation of the traditional Nishijin pattern culture through promoting computerization and transmission of information to the world. We believe that this will take us toward the final goal.

This project was started in July of 1998 by the present union, which was designated as a site for the survey of the union computerization promotion plan, receiving a grant from Kyoto Prefecture Central Association of medium and small enterprise organizations.

References

[1] The 100th anniversary commemoration journal: History of Nishijin design , Nishijin Design Doshikai, 1998.

[2] Let's think about tomorrow of Nishijin design with all: The technology of Nishijin is sent to the world as a Japanese culture, Toshio Mitsuhashi, Kazunari Morimoto, Nishijin Design Doshikai, 1998.