

Putting Community Design into Practice: Campus Master Plan for Kyushu Institute of Technology

● Kazutoshi Sakaguchi ● Takashi Hirano ● Hisashi Hashimoto ● Yoshitaka Sato
● Hirokazu Harada

In line with the Guide to the Creation of a Strategic Campus Master Plan advanced by the Japanese Ministry of Education, Culture, Sports, Science and Technology, Fujitsu has drawn up an ideal shape for the Kyushu Institute of Technology envisioning its three campuses (Tobata, Iizuka, and Wakamatsu) 30 years into the future. In this effort, we adopted a Human-Centered Design (HCD) approach that emphasized values, ideas, and needs and derived an identity for Kyushu Institute of Technology through interviews and conversations with students, faculty, and other stakeholders. Furthermore, to incorporate future expectations of the university in the areas of community revitalization and the aging society, we conducted fieldwork, World Café sessions, and workshops with students, faculty, staff, and local residents and formulated a user-participation type of campus master plan that takes into account a new relationship between the university and community. This paper describes this process and our community design methodology.

1. Introduction

The evolution of social networking services (SNSs), typified by Twitter and Facebook, has led to an era in which individuals can easily connect with society. It is now possible for individuals to directly access communities to share views and values of common interest beyond their respective countries or social positions. As the speed of information propagation increases, new activities between people and society are flourishing in diverse scenarios including the home, company, school, and local community. These social activities are taking on the form of a new movement called community design,¹⁾ and the new relationships born of such activities constitute new value—they are a source of social innovation that functions as a new medium.

As a process associated with identity formation, community design has been attracting attention as a technique that can be effectively applied in community planning and community revitalization. Along these lines, we, the authors, have been involved in the formulation of a campus master plan for the Kyushu Institute of Technology (referred to here as “Kyutech”), one of the many national university corporations in Japan. This endeavor has provided us with an opportunity to

consider how a university community should function through specific types of fieldwork.

The role of a campus master plan, which is mainly directed at national university corporations, is to provide a long-term plan that supports the implementation of the university’s strategic vision and academic plan in terms of its physical environment and facilities, describes a future vision for which the campus should aim, and presents policies for campus development.²⁾ In the past, the strong will of facility planners meant an approach centered for the most part on facility design based on zoning and layout plans. This approach, however, failed to consider how students and faculty—the people who are actively involved in campus life—feel about those facilities and what kind of activities are actually performed on campus. These questions regarding the value proposition of facilities have promoted a return to Human-Centered Design (HCD). In addition, “soft” design has become essential to investing resources on a limited budget, and creating an attractive vision has become the key to obtaining funding.

In this paper, we describe the above process and a community design methodology.

2. Future relationship between university and local community

The population of Japan is expected to decrease gradually due to the low birth rate and aging population.³⁾ This trend toward depopulation will be particularly hard-felt in rural areas—the population of 18 year olds in those areas is expected to decrease significantly. Under these conditions, a variety of highly competent personnel including students from abroad must be welcomed, and education and research must be continuously promoted.

Additionally, with respect to the entire community, there are high expectations that a university, as a special place where young people gather, will be a driving force behind community activities. As the population rapidly decreases and ages, the university should take on an even bigger role in community planning. The University Reform Action Plan announced by the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT) introduces the Center of Community (COC) concept in which universities lie at the core of community rebirth. It sees the role of universities as nurturing people who can drive social change and building an intellectual, innovative foundation as a center of knowledge.⁴⁾ This plan also calls for expanded assistance to small- and medium-size private universities in their efforts to cooperate with and contribute to the local community in a wide range of fields including the environment and tourism. The mutual growth of campus plans made in cooperation with the local community and plans and policies advanced by the local community should lead to community revitalization.

3. HCD approach

The formulated campus master plan should present a vision of the ideal university, say 30 years into the future, and reflect a consensus among those concerned (stakeholders) both inside and outside the university. Accordingly, in the formulation of the campus master plan for Kyutech, it was important that stakeholders share their values, ideas, and needs with respect to the university so that the path to be taken by the campus could be optimized.

For this reason, it was decided to adopt an “HCD approach” in formulating this campus master plan. This approach placed importance on the viewpoints, values,

ideas, and needs of all stakeholders inside and outside the university including students, faculty and staff, alumni, and local residents. Specifically, it involved interviews, open dialogs, and questionnaires to determine the values, ideas, and needs of the stakeholders as well as discussions and exchanges of opinion regarding an ideal vision for the university. Additionally, based on the viewpoints expressed by the stakeholders, basic information was collected through observational research and literature surveys to understand the space on campus and in the surrounding community, and a “human-first” multi-faceted analysis of that information was performed. Furthermore, in addition to interviews, hearings, questionnaires, fieldwork, and other customary activities, participatory processes such as World Café sessions and workshops were conducted to develop an understanding of actual conditions (**Figure 1**).

In conventional university facility planning, a “facility-first” approach is commonly taken in which plans for repair work and new construction originate from information on facility/infrastructure layout, structural aging, excessive/insufficient space, etc. This approach, however, does not support creating an ideal vision of a campus shared by the entire university and reflecting the opinions and ideas of all stakeholders. In contrast, a human-centered approach using the processes described above supports the creation of a campus master plan that is highly appealing to all stakeholders.

4. Uncovering local resources through fieldwork

We conducted fieldwork to determine up-close the actual state of space on campus and in the surrounding community. Specifically, we walked around the local community and campus with a camera in one hand and a map in the other to gain a first-hand experience of those areas using our five senses. This approach made it possible to intuitively pick up on things from the field and to gain insights into the relationship between the university and local community. The fieldwork was broadly divided into four viewpoints.⁵⁾

- 1) History axis
What kind of history do the space and structures, land and facilities, scenic elements, etc. have?
- 2) Space axis
What is the condition of roads, buildings, and

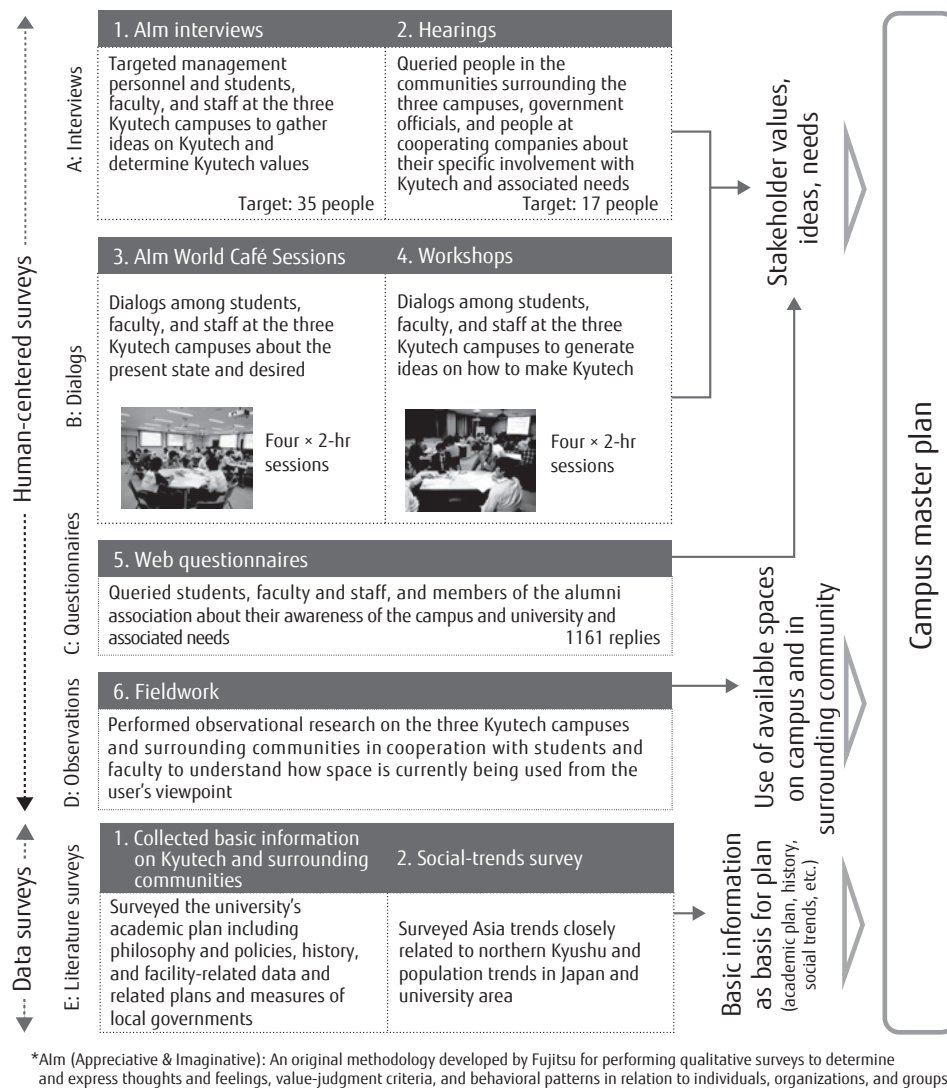


Figure 1
Process used to formulate campus master plan.

space and how are they used?

3) Nature axis

What are the main features of the topography, greenery, water systems, wind, and natural scenery?

4) Life/information axis

What are the features of people, objects, things, and daily life on campus?

In conjunction with this fieldwork, we collected information on urban planning and district planning in the surrounding communities and compiled basic data on the Kyutech campuses. These efforts enabled us to clarify possibilities and problems with the Kyutech campuses and surrounding communities as a starting point

for drawing up a future vision.

5. Values, ideas, and needs of Kyutech

We compiled the values deemed important by Kyutech on the whole and the ideas and needs of each of the three Kyutech campuses on the basis of the opinions set forth by stakeholders as obtained from Appreciative & Imaginative (Alm) interviews, hearings, and Web questionnaires. The Alm interview is an original methodology developed by Fujitsu for performing qualitative surveys to determine and express thoughts and feelings, criteria for judging values, and behavioral patterns in relation to individuals, organizations, and

groups when performing human-centered design. Past campus master plans were centered about quantitative surveys based on questionnaires that provided mostly evaluation-type replies, which made it difficult to track down the true nature of problems. By conducting Alm interviews, we were able to uncover an identity for Kyutech.

6. Creating new values through dialog

Since the judged values were still in the hypothetical stage, we probed even deeper by conversing with diverse types of stakeholders via World Café sessions and workshops. The World Café sessions, held at each campus, focused on the identity of Kyutech by posing questions like “In what situations do you feel that something is very Kyutech?” Stakeholders such as students, faculty, and staff were asked to participate in these sessions to consider the characteristics of Kyutech through conversation. Since these dialogs produced qualitative information in contrast to the information obtained from hearings, they reflected values at a much deeper level. They also enabled the participants to exchange opinions about Kyutech values, thereby enabling them to form a consensus at the same time (Figure 2).

The workshops provided us with an opportunity to exchange ideas with students and faculty on how Kyutech can keep growing and getting better for many

years to come. Considering a variety of design ideas together with stakeholders made for a greater sense of participation in all concerned. It was a new design experience that brought to light a variety of things that had gone unnoticed (Figure 3).

7. Creating ideas for specific policies using work cards

Following the formulation of a vision, an action plan for implementing specific policies was designed as part of a medium-term plan for the current fiscal year by holding a workshop with a “work card” format. Here, an action was described in the form of “Where and what kind of activity and what kind of expertise (faculty) should be applied and what social or university problem should be solved by that activity?” This type of program creates an action by appropriately combining three types of cards, ISSUE (objective, problem, etc.), PLACE (location), and EXPERTISE (research know-how, specialty, etc.), derived from survey results on a long-term vision. The work cards for a resulting action can be connected, facilitating the design of relationships. The program has the property of gamestorming,⁶⁾ which means that it is effective in enabling anyone to easily create ideas on an ongoing basis. Furthermore, by defining “stakeholder,” it becomes easier to understand and convey how the expertise of the university can be put to good use for society. This workshop helped to generate about 300 ideas, which were presented in a storyline format to express a growth strategy (Figures 4 and 5).

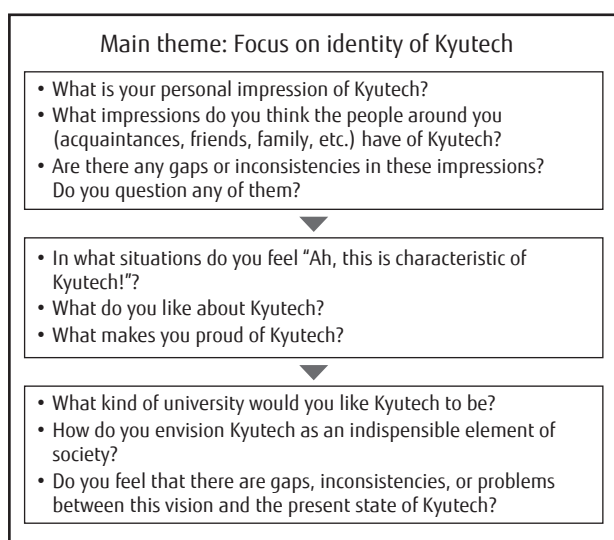


Figure 2
World Café sessions: discussion theme and process.



Figure 3
Workshops: theme and process.

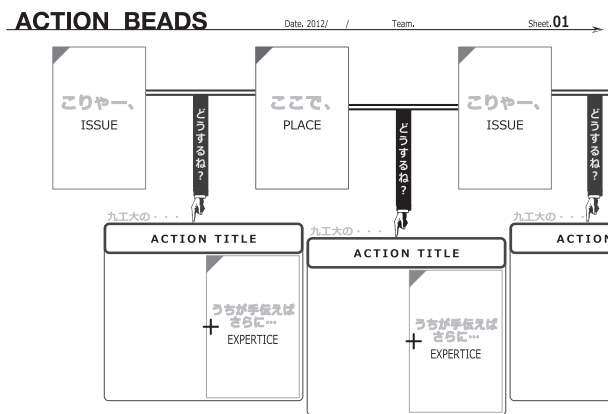


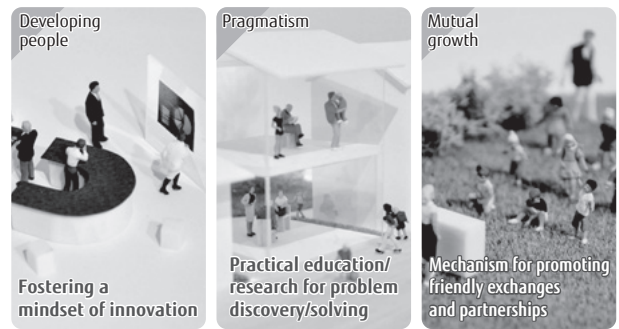
Figure 4
Worksheet.

8. Branding design for activities

The formulation of this campus master plan included activities for deciding on a project name and logo design and for putting up event-notification posters throughout the university to persuade many people to participate [Figure 6 (a)]. Specifically, we attached activity publicity posters to the sides of temporary fences surrounding on-campus construction sites during the campus festival period. Covering construction sites with posters in this way had the effect of creating a symbol of a participatory process [Figure 6 (b)]. Moreover, by delivering information making use of both public relations magazines and SNSs, the activities themselves became a new form of media supporting the creation of new relationships. This kind of branding design can foster independence in the form of “activities = community” while promoting sustainability.

9. Shape of university-created community

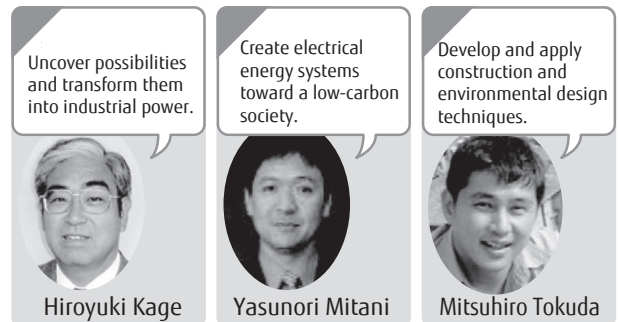
The Kyushu Institute of Technology Campus Master Plan (Long-term Vision) 2012 was completed through the support of many stakeholders.⁷⁾ This plan included the objective of the campus master plan, referred to as “A Campus Encountering Future Technology,” and five basic policies required to reach the objective. The “Characteristics of Kyushu Institute of Technology” presented therein presents an identity exclusive to Kyutech and a source of community revitalization. Conversations that took place in formulating this plan exposed us to diverse ideas and thoughts



(a) ISSUE card



(b) PLACE card



(c) EXPERTISE card

Figure 5
Work cards.

on the university and underscored the importance of the community. A campus master plan is, in essence, community design. Looking forward, we can expect execution of the action plan to create a new relationship between the university and its surrounding community and to achieve a form of community planning centered about the Kyushu Institute of Technology (Figure 7).

10. Conclusion

It would be desirable if the fieldwork conducted by the authors through face-to-face talks with stakeholders on campus as well as participatory processes



Figure 6
Branding design.



Figure 7
Expressing a vision through models.

such as World Café sessions and workshops became a permanent fixture within the university as a “forum” for contemplating the future. Such a forum could become a framework for ongoing thinking about the future of

the university, that is, a future center.⁸⁾

This campus master plan was introduced as an example of “National University Corporation Facility Upgrading (Achieving an Attractive Campus Master Plan Environment)” by the Department of Facilities Planning and Administration, MEXT, in “Briefing on National University Corporation Facility Upgrading” and was highly evaluated as a new approach from various perspectives. This HCD approach clarified the identity of the target community and enabled it to be changed to a new form. As a methodology for the design of community revitalization and resource use, we expect its application to be expanded to a wide variety of fields.

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Kazutoshi Sakaguchi
Fujitsu Design Ltd.

Mr. Sakaguchi is engaged in vision formulation and strategic design for new businesses through a business process applying future centers and workshops.



Yoshitaka Sato
Fujitsu Research Institute

Mr. Sato is engaged in consulting work supporting the formulation of diverse visions and plans and in achieving workplace reform in universities and public institutions.



Takashi Hirano
Fujitsu Design Ltd.

Mr. Hirano is engaged in new product and service planning through design consulting and in vision development for new businesses.



Hirokazu Harada

Fujitsu Laboratories Ltd.
Mr. Harada is engaged in R&D and education related to community media and design concepts.



Hisashi Hashimoto
Fujitsu Research Institute

Mr. Hashimoto is engaged in consulting on conducting surveys and research, formulating grand designs, and optimizing management, administration, and IT processes in the public sector such as public offices and universities.