Proposition for an Enhanced Service Business Model by Developing Service Communities

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Abstract--In servitized economy, it is necessary for technology industry to introduce service concept into their business model. This paper aims to propose a framework of sustainable service business model by developing a service community as a social infrastructure. As a result of building close relationships between customer and service provider, the both parties begin to form a community involving other customers or stakeholders such as local community, natural resources or related organizations. We conducted three advanced cases of supermarket, public service, and NPO activity to identify how customer communities are developed and what the main drivers to promote the community building are. The paper finally proposes how the service value is co-created among the community members. Major actors for the community could be curator, follower and promoter, and the each actor has specific role in the process of forming a core group in the community. And the group would be sustainable when it contains economical routine to earn constant economic result. Understanding such framework will be the key to establish a community that will be an essential infrastructure for sustainable growth of service business model. We also refer to the technological factors such as internet virtual community, or social media.

I. BACKGROUND AND PURPOSE

It is becoming increasingly important to create service based business model in the servitized economy to establish sustainable growth [1][2][3]. This is why a service business model is regarded as one of the key factors in increasing competitiveness even in manufacturing industries [2][4]. However, the scheme of service based businesses is more complicated and difficult to establish because it is carried out by human contact, and is more related to human sensitivities compared to trade in products.

Succession and expansion of the relationships between service providers and service receivers will not only change the quality of the relationships but broaden their scope. Thus, we can find cases of communities being formed between both parties [5][6]. These are not just intended to exchange products/services but to build frameworks to maintain closer continuous relationships. Promoting a community creates mutual trust, which increases the value of the community. Service Dominant Logic (SDL) has focused on value in context in contrast to value in exchange in Goods Dominant Logic (GDL) [7][8][9]. This is based on the difference in timeframes when the values are achieved. If we observe the continuity of services in the time dimension, we can observe value in keep [10], and value in trust [6] as the foundations of progress in mutual relationships.

We define the creation of service communities as the most

matured formation of progress in services in this paper. We aimed at analyzing how the relationships between service providers, service receivers, and other multiple stakeholders would be developed, and what the real elements to promote them were. Thus, the main purpose of this research was to find the mechanism for creating service communities, and to contribute to the modeling of service business.

Some former literature has tried to analyze service quality from the servicers' perspective. Parasuraman Zeithaml, and Berry proposed SERVQUAL as a tool for evaluating service quality. It classified five gaps of service quality in customer satisfaction, and ten elements of service quality [11]. Heskett Sasser, and Schlesinger indicated the importance of employee satisfaction to improve customer satisfaction, which they called a service profit chain [12][13]. He enhanced this concept to 'ownership'. Transferring loyalty to ownership would increase service value [14]. Although these researches have offered important perspectives toward analyzing service provider's initiatives, they have contributed little to mutual relationships. Most important issue is how they promote their raltionship through products/services, what it means to their quality of life.

There has also been some literature from the community perspective [15][16], which has discussed the success factors to activating areas with mainly public services., However, they cover very limited scope. Communities play an effective role for establishing close relationships between service providers and customers, but there has not been sufficient research on the process of forming communities or the elements for promoting them. Furthermore, the meanings of transactions are changing through the process of promoting relationships. We need to find the process by which communities are formed with regard to the meanings of transactions.

As the essence of services involves continual relationships between human beings, which include human sensitive interactions, the human-centric essence of communities will be harmonious to services. We implemented case studies and used a method of unstructured interviews. We found technological elements necessary for a sustainable service model by thoroughly examining the service community mechanism and its roles.

II. PERSPECTIVES OF ANALYSIS

We established three perspectives for analysis.

(1) Perspective of extended relationships

What kinds of stakeholders are included in the process of

extending relationships from service providers/service receivers to the community? How should we consider the diffusion of innovations in relationships and the knowledge transfer through the process? [17]

(2) Perspective of transferring transaction content

How can we generate social value (social capital) within the context of continuity of relationships in the content on transactions rather than merely exchange value, i.e., community logic (symbiosis/sustainability) other than market logic (profit/competition)?

(3) Perspective of essence of transactions and drivers

How does gift logic work in establishing long term relationships rather than short term individual equivalent transactions (sell/purchase relationship) as the essence of transactions? Do both parties feel ownership to share common meanings and become promoters?

III. CASE STUDIES

We carried out some case studies to examine how services develop communities by establishing continuity in relationships. We have mainly focused on the Kanazawa district in this paper because that district has strongly been promoting and communicating service models. The cases were the 21st Century Museum of Contemporary Art, Kanazawa (Case 1), the Houju Memorial Hospital (Case 2), and the planner group of Hatto Recipe (Case 3) that was aimed at supporting reconstruction from the serious tsunami disaster in the Tohoku district.

A. Case 1: 21st Century Museum of Contemporary Art, Kanazawa

The 21st Century Museum of Contemporary Art, Kanazawa is a modern museum built in 2004 under strong leadership by the mayor of Kanazawa who was anxious about the future of the city. It was aimed at vitalizing the city and at creating a new facility as the city's cultural core. The four main concepts underlying its construction [18] were:

- 1) To be a museum that moves in step with contemporary society.
- 2) To create a participation-oriented museum along with citizens and revitalize the community.
- 3) To be an art museum open to the world, where regional traditional arts connect with the future.
- 4) To grow in spirit along with children.

The museum was designed to be like a park open to the city and close to citizens, so that it was open for longer than ordinary museums ('public zone' was open from 9 am to 10 pm) and low admission fees were charged. The exhibits were unique so that visitors did not simply view them but often participated in them to experience them physically. The 'Swimming pool' and 'Color activity house' demonstrated how perception varied according to visitors' positions near

the objects. The 'Composition' allowed visitors to express feelings on a piano situated at the center of the exhibition room when they observed the exhibits around them. New types of play were carried out in buildings along city streets, and audiences moved from room to room along the scenario. Visitors utilized all five senses when participating in the program.

Although this was initially very new to the traditional city of Kanazawa, the mayor's strong resolve and director's ideas to achieve the concept were accepted by intellectuals and implemented from the start of 2004. There are approximately 12 full-time curators, and they have successfully introduced many unique ideas. They also plan to collaborate with other unique institutions such as the Takeo City Library (in the Kyushu district) and the Asahiyama Zoo (in the Hokkaido district).

Several items could be identified from the three perspectives of analysis.

They organized a route from Kanazawa station to the museum as an 'art avenue' and collaborated with many shops along it. The events at the museum played the role of gathering people together and activating the city as a public relationship channel. It was designed to coordinate businesses, education, the arts, and culture based on the close relationship between the city and the museum (perspective 1). They intended to launch a museum membership system called "zawart" and volunteers activities to support events. These were not only based on Market Logic but on Community Logic as symbiosis with society to create new cultures (perspective 2). Visitors were encouraged to visit the museum more frequently by inviting elementary school-age students to attend gratis and enclosing 'complementary tickets' inside envelopes. We found the concept of 'gifts' retained longer lasting relationships between multiple stakeholders.

B. Case 2: Houju Memorial Hospital

Houju Memorial Hospital is situated in the city of Noumi in Ishikawa Prefecture as a 'hospice in my district'.

Wa-Ra-Ni is a mission statement that means friendliness, delight, and health to people and society. Its five visions [19]are to provide:

- 1) Lifetime health for all as a district hospital,
- 2) The building of partnerships,
- 3) Patients rights and participation,
- 4) Evidence based medicine from emergency to chronic care, and
- 5) Social security and economical prosperity.

The hospital defines its activities as 'a community business that will change patients' anxieties about their health and that of society to peace of mind'. It believes both medical and management quality are important, and intend to balance the four elements of science, art, humanism, and innovation. It started the 'Waranijuku' school to educate core members and conducted 'Miraikenshuukai' seminars to spread innovation among many people to contribute to better understanding of medicine and communication.

Several items could be identified from the three perspectives of analysis.

The hospital offered a loopline bus to patients that created a natural community among them. It held events and parties that created better communication (perspective 1), especially as it was its 30th anniversary. The hospital arranged facilities for patients to have medical examinations by collaborating with hot spring hotels around it. This was beneficial for all three parties (co-prosperity). It meant balancing the numbers of customers at these hotels, avoiding bed shortages at the hospital, and providing stress-free examinations in relaxing circumstances to patients. It focused on symbiosis with society (perspective 2). Moreover, the medical organization pursued the concept of healthcare to achieve medical cures and provide patient care. This was based on the idea of society and outstanding communities (perspective 3).

The main issue was to support patients to focus on medical action, and to establish cooperation with patients.

C. Case 3: Planner group of Hatto Recipe [20]

Investors of cloud funding to provide reconstruction assistance after the Tohoku tsunami disaster established a community in autumn 2012. 'Hatto' is a local food in the Tohoku district. The ends of udon noodles (hatto) were originally discarded but they are now a regular product and utilized as local food in Tohoku. They decided to make a recipe as the target of their community. They gathered hatto recipes publicly, tried some by themselves and issued certified recipes. The group originally consisted of six volunteers who were sympathetic to activities to provide assistance to reconstructing the Tohoku region. Individual members offered their own business skills. They continued to supply hatto food in the morning market in the town of Kichijouji. In the summer of 2013, they declared August 10 to be 'hatto day' (phonetic pun) and held a big event in Kichijouji. Thirteen restaurants collaborated to supply hatto food, and there was also a concert by musicians to help approve the concept.

Several items could be identified from the three perspectives of analysis.

The factory had to develop new sales channels such as the Web to reconstruct the noodle business. The community was autonomously built by investors. They created and extended the relationship between investors. The strong determination of members in the first step was the driver, but continuity not only required strong resolve but also practical operations. Followers in many cases fulfilled this role. It is very important to transform resolve into plans. The skills of information technology (IT) and public relationships are crucial to accumulate and transfer knowledge to promote the community (perspective 1).

As these activities were based on reconstruction assistance, daily food materials turned out to be expressions of lifestyle and culture in the Tohoku area. Market logic turned into Community logic (perspective 2).

Their investment was basically not for economical reasons, but to provide assistance. Consequently, their motivation was to feel accomplishment about offering their skills and to enjoy the activities in the group. This meant that the activities were not economically equivalent transactions but were based on the concept of gifts (perspective 3).

The main issue was how to keep their activities sustainable to adopt the second phase of reconstruction assistance.

IV. DISCUSSION – MODELING OF SERVICE COMMUNITY

A. Extending relationships among stakeholders

We found that various stakeholders were related to one another (Figure 1) through analyzing these three cases. When services are accepted continuously for a certain period, the relationships between service providers, service receivers, and other stakeholders become closer [5][6].

In addition to parties in direct transactions, special interest group (SIG), customers and inter-customers, intangible entities such as culture, history, and lifestyle become elements of the community. Developing a community is an innovation, and communication between multiple participants is a knowledge transfer issue [21][17].

We found inter-customers as members of the community in society in all the case studies who were offered a place to maintain mutual co-operation. This idea was based on community logic where participants wished to maintain continuous relationships. We observed different stakeholders in each case as indicated below. Every case had multiple stakeholders including service providers, customers, and additional stakeholders. Triad relationship is quite different from dyad one.

- 1) service provider/customer/SIG: 21C Museum, Hoju Hospital, Hatto recipe planner
- service provider/customer/inter-customer: Harley Davidson [6], Club Tourism [6]
- 3) service provider/customer/inter-customer/SIG: 21C Museum (membership)
- service provider/customer/SIG/lifestyle: Hoju Hospital, Hatto recipe planner
- 5) service provider/customer/SIG/culture history: Hatto recipe planner, 21C Museum, Club Tourism [6]
- 6) service provider/customer/culture · history: Starbucks [6]

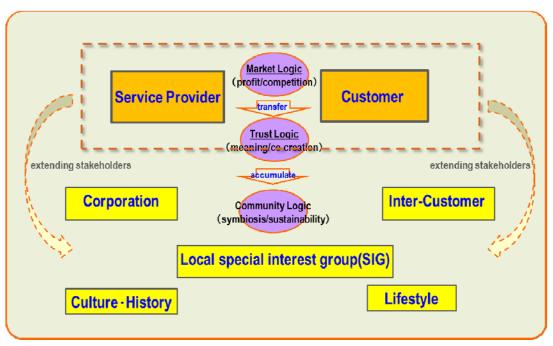


Figure 1: Extension of Relationships (stakeholders)

B. Change in transaction content

Transaction content will change along with the extension of stakeholders (Figure 1: Ellipses indicate change from market logic to community logic [22]). Original forms of service transactions were to sell/purchase products/services between service providers and customers. Both parties were opposed to each other in this step [5][6]. Therefore, the content of the transactions was the exchange value of products/services as an equivalent value. These transactions were based on market logic, economic logic, and profit and loss logic. In contrast, customers changed positions after establishing continuous transactions and began to gain ownership [16]. It is effective to share the meaning of the transactions (perspectives and world view) embedded in the services to promote this. The relationship between service providers and customers changes from competition to co-ordination in shared purposes from market logic to trust logic [6]. In addition to this, communities are formed involving parties in direct transactions and local SIG, culture/history, and lifestyle. Continuous transactions and shared perspective will generate mutual trust. Long term continuous relationships become sustainable and symbiotic and are based on community logic to co-create social capital [23][24]. Social capital is consist of trust, reciprocity, and network, and is a source of mutual reliance [25][26].

step case	1step Forming a strong resolve	2step Developing contents and planning	3step Extending diversity and sustainability	Comments
21st Century Museum of Contemporary Art Kanazawa (case1)	Establish position of Kanazawa Museum open to the community	Planning exhibits for customer experience Inviting children (repeater) Symbiosis with the society (art avenue/support shops)	Full time Curator Integration of image, drawings, music, play Supporter/volunteer	More than 1.5million visitors
Houju Memorial Hospital (case2)	Wa-Ra-Ni Home Doctor with roots to the region	Activating stuffs Cooperation among customers, society Medical examination staying in a hot spring hotel (co- prosperity)	From medical cure to preventive care, chronic care	Medical + management quality (science, art, humanism, innovation)
Planner group of Hatto Recipe (case3)	Community for Supporting Revival from disaster	Publishing authorized recipe Offering Hatto dishes in the morning market The annual Hatto festival	Introducing Tohoku specific food and culture Sense of achievement by offering skills for the community Joy of group activities	Sustainable economy Motivation

We analyzed key elements in the process of community development.

The leader (service provider in most cases) has a strong resolve and unique perspective in the first step that indicates the core value/meaning. Table 1 summarizes the detailed content of elements for each case. Case 1 was aimed at establishing the position of Kanazawa for the core value, and to open the museum to the community. Case 2 was willing to be a hospital of personal reliance with roots in the region according to the mission statement of 'Wa-Ra-Ni'. The target in case 3 was to assist in reconstructing manufacturing businesses. The core value was derived from perspectives, a world view, or personalization. These were the basic driving forces to attract people and to promote service quality. 'Curation' has become popular these days, which is similar to this idea [28][29].

There has been some literature that has reported talented followers are important to achieve perspectives and core values proposed by the leader to develop a community [30][31]. It is also important to provide some different roles to sustain or expand the community. Gladwell pointed out that the combination of three characteristics is necessary to expand an idea over the tipping point –a 'maven' who stores knowledge about specific issues, a 'connector' who connects people, and a 'salesman' who is able to persuade people around him [32][33]. Rogers pointed out it is necessary to have an opinion leader who is good at communicating with outside people, and to have the diversity and distance of a diffusion network [21]. It is quite important to utilize

communication devices such as the Internet or public relations (especially in Case 3) to transfer knowledge among multi-stakeholders to externally retain transmission force and internally maintain motivation.

Followers going along with a strong resolve form a core member group in the second step (Figure 2). They devise an execution plan to put the strong resolve into practice. The importance of followership [28] to synchronize and approve to the proposals turns mere ideas into value [32] as has been pointed out. Various skills and job experience were combined in Case 3 to form a core membership group. Core planning members were organized in Cases 2 and 3 to handle the sense of crisis.

After the core member group had determined their activities in the third step, they faced other issues in sustaining or expanding them. It was necessary to keep motivated and maintain the economics of business to continue the activities. This then made it easier for the participants to be socially accepted, and easier for them to stay. They designed various economic cycles in collaboration with society and local entities such as schools or enterprises in Cases 1 and 2. These played an important role in sustaining the community. Some communities sought to expand but some did not. Sustainability was more important than expansion for some communities. They maintained their organization and intended to have weak connections with outer entities. The community in Case 3 was trying to find continuous activities because construction assistance seemed to be in the second stage.

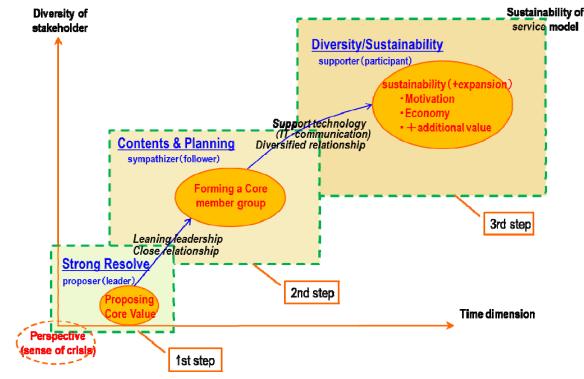


Figure 2. Model of steps of developing a community

C. Sustainability of service transaction through reciprocity of gift and counter gift logic

The essence of service transactions cannot be understood by simple exchanges of services and rewards by analyzing the relationships between service providers and customers in either profit or non-profit organizations. The content of transactions is more than mere products/services as service originally meant somebody was being served. It is necessary to refer to the idea of reciprocity to analyze mutual relationships and the values offered/received by community members. This paper defines service transactions as mutual gifts and counter-gifts rather than sales/purchase transactions.

Mauss expressed human behavior as a pattern that consisted of liabilities for gifts, receipts, and counter-gifts. Potlatch is a kind of gift giving ceremony, and Kula is a transaction between different tribes [34]. Mauss carried out ethnographic research and found numerous important implications for human behavior. These three liabilities were counteractions but were not equivalent [35][36]. They were not carrying out equivalent trading of products/services but adding something sensitive to physical objects. This was something like a mental, social kind of honor of existence to be gifted, or 'noblesse oblige' [37][38]. We can find some consideration for redistribution and balance in Case 3. There is an obligation to provide a counter-gift; however, it is not economically equivalent, and the burden is finally settled according to individual roles. Inviting elementary-school children free, and folding a 'complementary ticket' inside an envelope is a kind of gift. This initiative may have aroused incentives and a sense of liability for visitors to go to the museum again. Those who went to the museum several times may talk with their friends (through word-of-mouth) like salespeople, which is regarded as a kind of counter-gift. There are no guarantees of direct equivalent give and take relationships between activating customer flows to support shops and museum event tickets, but the owners of the shops are expected to feel ownership to have collaborated with the museum. This kind of gift chain by service transactions will make a contribution to the sustainability of service businesses.

There are still a few remaining issues such as how much imbalance is acceptable over time. However, recognizing the relationships from the concept of gifts should provide numerous suggestions to our research.

V. CONCLUSION

We analyzed case studies of service communities from three perspectives and proposed necessary elements for establishing a service business model to achieve sustainability. Stakeholders are extended from merely being participants in direct transactions to those involved with special interest group (SIG), culture/history, and lifestyles from the perspective of extended relationships. The value of exchange (economic value) is turned into the value of trust (social capital) along with this, which demonstrates it is necessary to have discussions based on community logic not merely market logic. Finally, the essence of a transaction was not merely an equivalent transaction but a gift-oriented one to create a long-term relationship. People became co-owners of the meaning and the co-creator of the service communities. It is also important for sustainable development to create organizational innovation and to utilize information technology to enable close communication.

Finally, the role of trust in the service community, and gift-oriented logic that may adjust mutual liabilities are important issues that remain to be resolved furthermore in future research.

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2014 Proceedings of PICMET '14: Infrastructure and Service Integration.

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