Clients of Architectural Services and Online Communities: Exploration and Facilitation of Information Streams in the Korean Context

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Abstract
The status of online communities for clients of professional architectural services has been explored only rarely, although various communities have been established autonomously. These communities have faced challenges regarding the reliability of information and incentives for sustainable involvement of members. These concerns can be tackled by facilitating a community embracing socially embedded human actions and virtual markets in which recommendations are powerful for promoting sustainable information streams. This study aims to provide a theoretical framework to implement a structured online community in which trustworthy information are shared in sustainable manner by cultivating social actions in relationship. A preliminary investigation into the opinions of a specific group of professional architectural service clients in existing online communities is conducted. Based on relevant findings, a prototype of a structured online community, which systematizes information flows, involvement of service providers, and evaluation of service quality is developed. A main survey provides insight of clients on the motivation to upload information, usefulness of information, and expected customer power in the structured online community.

Keywords: architectural service clients; online community; knowledge spiral; marketing; customer power; information systems

1. Introduction
While clients are customers of professional architectural services, they are also key players as project directors. Specific groups of clients such as occasional clients typically do not have sufficient technical knowledge and in-house human resources to direct projects (Kim, 2003). If clients obtain credible information timely, they will position themselves to select proper consultants and procedures. Therefore, first-time or irregular clients must determine how to obtain essential information.

Online communities for professional architectural service clients (hereafter, OCPASCs) can provide information to clients even before they contact professionals. However, an autonomous OCPASC is difficult to inaugurate and sustain because service performance varies significantly, even with the same requirements (Crane, 1993), and professional services are hard to describe with a model (Lowendahl, 2005). Thus, it has limitations to generalize anticipated results and service procedures. Consequently, the usefulness in terms of credibility regarding quality or reliability of information provided in online communities has been questioned.

Regarding implementation and operation, autonomous OCPASCs have unique characteristics compared to conventional information systems developed to aid clients. For instance, Kamara et al. (1999) have developed ClienPro by means of a hard systems approach, which assumes that the information flows according to pre-defined procedures to support decision-making (e.g. Mahmoud and Arima, 2011; Kwahk et al., 2011). On the contrary, online communities are similar to soft systems, which take a more tribal view of organizations as relationship-managing entities, although a facilitator is required (Fan et al., 2008).

In OCPASCs, the reliability of information and sustainable information flows depend on the motivation and involvement of members, and thus those should be explored and explained by means of a generic view considering social actions in relationship.

The aim of this research is to develop a general framework to explore current information streams in autonomous OCPASCs. As a practical solution to enhance the usefulness and sustainability of such communities, the authors present the concept of a...
structured OCPASC, which systematizes autonomous OCPASCs. Because the provisions of professional services vary according to the segments in the market and local conditions, a structured OCPASC should be implemented by targeting certain group of clients in a specific region. Individual clients in South Korea who occasionally purchase architectural design and building services were selected for this research. The authors proposed a schematic model of a structured OCPASC and developed a prototype system. A survey was conducted by targeting clients of existing OCPASCs in order to obtain their opinions on the proposed system.

2. Theoretical Framework
2.1 Perspectives to Analyze Actions in OCPASC
   
   Motivations to provide useful information and to sustain its flows in OCPASCs are discussed according to three perspectives framed by Lichbach and Seligman (2000).

2.1.1 A Rationalist Perspective: Information Search
   
   According to Blackwell et al. (2006), customers believe that they will gain the best value if they act knowledgeably. Regarding the knowledge spiral theory (Nonaka, 1994), potential customers search for information expressed by knowledgeable customers who have experience with similar services. Thus, it is reasonable to assume that potential clients have the rationale and motivation to search for information by accessing existing contents or asking questions of other clients in OCPASCs.

   However, if people do not recognize meta knowledge via keywords or data fields, they cannot use available resources. For this reason, administration to provide initial keyword sets to initiate an information stream is required.

   Another challenge is the reliability of information. The value of utilizing a large group of people for evaluation of information is the potential for greater reliability. Socially valued information is powerful. For example, word of mouth can be a powerful marketing method in the age of social networking. Though experienced clients can most effectively evaluate information, they do not have particularly strong motivations to share information, at least from the rationalist's perspective. Therefore, methods for motivating experienced clients in OCPASCs to share their professional knowledge should be discussed further.

2.1.2 A Culturalist Perspective: Reciprocity
   
   The culturalist understands that the norms of a community influence behavior. Unlike rationalists, culturalists focus on the effects of an organization's implicit rules. Thus, information streams occur in informal ways based on relationships among people (Mintzberg, 1979). In the social science domain, the intrinsic value of networks, or social capital, works as the motivation for action in a community, sometimes even leading people to act altruistically (Nahapiet and Ghoshal, 1998; Park and Koo, 2014). Generally, humans act respectably even without the incentive of direct benefits because they expect rewards or protection in the future. This tendency is known as reciprocity (Becker, 1976).

   Reciprocity can be regarded as a societal norm. Such norms force people to act to avoid exclusion from a group (Hardin, 1997). Once a community is constructed, a norm may involve punishment such as expelling rule breakers from the network if they do not act according to specified terms and conditions. For example, an individual may not share information, although he/she requests information from other group members. Consequently, rejection by the group can be expected.

   Even if norms are activated, it is difficult to determine whether OCPASCs are managed competently. Unfortunately, several online communities have become inactive. Therefore, rewards for providing information should be considered within the market mechanism.

2.1.3 A Structuralist Perspective: Market
   
   The structuralist perspective focuses on external conditions and their effects on the environment. For this study, the authors assume that customers maintain relevant reference power and service providers have marketing opportunities in OCPASC.

   Customers can expect benefits from online activities; especially opportunities to evaluate service providers for breaches in contracts or neglected service quality. Service providers spread information by expecting benefits in the market domain of OCPASCs. For example, service providers can offer potential clients useful information to attract them as purchasers.

   The initial service encounter (Hogg and Gabbott, 1998) is connected to targeted marketing by the identification of customers (Phan and Vogel, 2010). Autonomous OCPASCs do not manage customers from the viewpoints of service providers. However, customer relationship marketing (CRM) may be available for even small and medium-sized service firms if the domain of market is implemented in OCPASCs.

2.2 A General Framework to Explore and Explain Information Streams in OCPASCs
   
   Fig.1. describes a general framework for exploring and explaining information streams in OCPASCs, based on best value (i.e., rationale), reciprocity (i.e., norm), and financial benefits (i.e., conditions).

   Members of an OCPASC act according to their own motivations. Potential clients seek to be satisfied consumers, so they have a rationale to search for information about best value. Experienced clients are viewed as able to provide information with reciprocity and according to norms based on collective beliefs. Furthermore, the actions of all participants in online communities may be influenced by societal devices (i.e., conditions).
Experienced clients are not expected to answer questions voluntarily and engage in ongoing encounters, which happen between potential clients and service providers based solely on societal norms. Typically, such information streams occur when a market mechanism evolves in a structured system that is designed to provide rewards.

Issues of usefulness and reliability cannot be explored or explained according to the aforementioned three perspectives. Participants will not internalize information if the contents are not satisfactory. At a minimum, there must be a mechanism through which customers can be assured that available professionals will provide information tailored to situations that clients may face during service encounters.

While autonomously operated OCPASCs show the possibility to share information, hard system bound aspects are required to provide structure for its consistent operation. The necessary approach and functions can be identified through a preliminary investigation.

### 3. Preliminary Investigation

#### 3.1 Context: Online Communities in Korea

The preliminary investigation explored the opinions of clients and service providers on the status of OCPASCs and related expectations for information streams. The opinion of both sides should be analyzed to provide practical solutions (e.g. Choi and Cho, 2014). Interviews using an open-ended questionnaire were conducted with six individual clients and four service providers engaged in architectural design or building projects. Participants were asked about their experiences on acquiring information through OCPASCs; additionally, they were asked to identify their concerns or reluctance to use them.

As summarized in Table 1., ongoing challenges in the autonomously established OCPASC are as follows: cultural reluctance to reveal private information, no practical benefits of information sharing, uncertainty about reliability of information, and hesitation to recommend service providers due to potential conflicts.

An aspect that should be considered further is the possibility of sharing references for service providers. In many online communities, recommendations of service providers are prohibited due to potential conflicts that can occur when a project fails. However, members have asked experienced consumers about the best service providers and relevant reviews have been uploaded. Given that current autonomous OCPASCs have limited ability to evaluate references, a practical solution to obtain them from experienced clients is required. In order to maintain credible references, a system manager needs to involve.

#### 3.2 Main Survey Inquiry Theme Development

The current autonomous OCPASCs do not have functions supporting a structuralists approach, such as evaluation of service, recommendations of service providers, or searching mechanism should be sophisticated.

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**Table 1. Opinions and Expectations Regarding Current Autonomous OCPASCs**

<table>
<thead>
<tr>
<th>Category</th>
<th>Service providers' opinions</th>
<th>Clients' opinions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usefulness of information</td>
<td>- Useful for service providers to reduce client misunderstandings</td>
<td>- Useful only when information reflecting experience is provided</td>
</tr>
<tr>
<td>acquisition through online</td>
<td>- Useful for clients when experiential information is provided properly</td>
<td>- Not critical because general information is available even offline</td>
</tr>
<tr>
<td>community</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reasons for reluctance to</td>
<td>- Clients may be reluctant because of privacy issues.</td>
<td>- Partially reluctant because of privacy issues</td>
</tr>
<tr>
<td>provide information</td>
<td>- Service providers worry about leakage of their know-how.</td>
<td>- Hesitant to recommend service providers due to potential conflicts</td>
</tr>
<tr>
<td>Reasons for reluctance to</td>
<td></td>
<td></td>
</tr>
<tr>
<td>use online communities</td>
<td>- Uncertain about reliability of information</td>
<td>- Unable to perceive benefits from participation</td>
</tr>
<tr>
<td>Issues with reliability of</td>
<td>- Negative/positive evaluation is possible (i.e., partially reliable).</td>
<td>- Uncertain about reliability of information</td>
</tr>
<tr>
<td>information</td>
<td>- Clients may not wholly trust information provided by service providers.</td>
<td>- Generally not able to obtain exact information</td>
</tr>
<tr>
<td>General opinions on</td>
<td>- Protective measures from unjustified or intentionally negative evaluations</td>
<td>- Partially reliable; negative/positive evaluation is probable</td>
</tr>
<tr>
<td>methods to sustain online</td>
<td>by clients or other service providers are required.</td>
<td></td>
</tr>
<tr>
<td>communities</td>
<td>- Winner-take-all phenomenon can be a barrier to entry of new professionals.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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**Fig.1. General Framework for Exploring an OCPASC**
providers, and a place for service encounters. In addition, a mechanism to evaluate information and an approach to sustain the community are lacking. For this reason, the authors need a research instrument through which the feasibility of these functions are validated. In this research, the authors implemented a prototype of a structured OCPASC, a web portal for clients. The authors developed inquiry themes by assuming that OCPASCs are designed and managed by facilitators.

In this research, the authors implemented a prototype of a structured OCPASC, a web portal for clients. The authors developed inquiry themes by assuming that OCPASCs are designed and managed by facilitators.

Fig. 2 clarifies the research questions, aspects to explore, and inquiry themes by which perspectives discussed in previous sections are applied. In this study, customers’ attitudes toward information streams could not be obtained by direct investigation, so the authors identify attitude objects against which the internal opinions are externalized.

Inquiry themes are: (1) intention to provide certain types of information, (2) reasons for reluctance to provide or obtain information, (3) expectations for acquiring certain types of information, (4) aspects to enhance the performance of an OCPASC, (5) prerequisites for active participation in an OCPASC, and (6) expected change in customer power after implementing a structured OCPASC.

The first inquiry theme was applied to determine the intention of experienced clients to provide certain types of information. For successful operation of an OCPASC, information items necessary for potential clients should be provided as follows: process, duration, cost, appropriate type of service provider, and list of references for available service providers (Kim, 2003). Interviewees in the preliminary investigation said that they felt reluctant to provide specific types of information (i.e., evaluation of service providers). Therefore, the extent of this tendency needs to be investigated. To investigate the insight of clients on evaluations of services, inquiry items are detailed as follows: faithfulness of service provider in explanation of service contents, monetary value of service, and general satisfaction level with service quality.

The second, inquiry theme explores the reasons for reluctance to provide or obtain information. Clients and service providers mentioned privacy and potential conflicts with negatively reviewed service providers as concerns in our preliminary investigation. The depth of worry or anxiety about these aspects was explored.

Third, the authors assumed that appropriate information could be acquired through information streams in online communities. Appropriate information was defined from the previous research (Kim, 2003); it includes process, quality of building with available budget, criteria for selecting appropriate service providers, and technology used for building. The expectations of clients for acquiring this information were investigated.

The fourth inquiry theme was applied to examine the approach and methods for enhancing the performance of an OCPASC. The authors investigated the necessary components for a structured presentation and evaluation of information. Reasons for involving a third party to judge the reliability of information were assessed as well.

Fifth, prerequisites to active participation in an OCPASC that were linked to the three aforementioned perspectives were investigated. Finally, the sixth inquiry theme was developed from the fundamental assumption of this research: an OCPASC can reinforce customer power that will trigger involvement of experienced clients and service providers.

4. Development of the Structured OCPASC

4.1 Schematic Model

Based on the general framework and practical requirements that were identified during our preliminary investigation, a schematic model to facilitate information streams in an OCPASC was developed, as illustrated in Fig. 3. The model assumes that the OCPASC is systematized to provide information as required and to manage reliability. Given that this information system is different from that of an autonomous OCPASC, the authors have referred to it as a structured OCPASC.

The authors assumed that if experienced clients think certain information is helpful, they may be willing to provide reciprocal information because of social norms. Experienced clients may explain their experiences in an exchange of information in return for measurable benefits. Service providers can obtain new market opportunities by answering to questions uploaded by potential clients.

4.2 A Prototype

To evaluate the schematic model, the authors developed a prototype for a structured OCPASC. The outlook of a structured OCPASC is similar to that of a web portal. However, as shown in Fig. 4, sections
are provided to implement sustainable information streams. As shown in the main menu presented in the right upper portion of the figure, the structured OCPASC consists of sections as follows: (1) client aid materials, (2) information of potential clients’ projects and available service providers, (3) information maintained and provided by the facilitator or system, (4) laws and regulations that the client needs to know, and (5) community in which the clients share information. Menus of sections are not divided exactly according to

Interactions between clients and service providers that are organized from the culturalist’s perspective mainly occur in sections (2) and (5). In the upper left portion of Fig.4., (5)-1 and (5)-2 show the subpages and menus of section (5) and (2)-1 is a part of section (2). If a client publishes his/her upcoming project plan or experiential project information along with an evaluation of the service providers in subpage (5)-1, community members may exchange opinions and questions on issues pertaining to the project on subpage (5)-2. The evaluation of a certain service provider will be filed, so the average rate of evaluation, which is valued information, will remain as shown in (2)-1. As shown in the lower portion of Fig.4., project plots can be displayed for service providers as well, as shown in subpage (2)-2. The name of the service provider is exposed to potential clients through pre-counseling, so an encounter can occur. As a consequence, the virtual market is sustainable, and information streams are facilitated in other sections.

In subpages (1) and (4) and on the process map, standardized guidance and legal information are provided. System managers upload up-to-date client-aid information in these sections. In addition, system
managers monitor the material provided by service providers because they may consult a potential client during service encounter when the intention to launch a project is uploaded by the client.

While the general framework is grounded in three perspectives to explain social actions, information streams are centered in interactions of data in ontological parts of information systems such as database management systems (DBMS) and relevant fields in subpages. Successful operation of ontological parts requires managerial and technical support such as removing non-value-added data and providing opportunities to resolve conflicts between clients and service providers.

5. Main Survey on Structured OCPASC

5.1 Questionnaire

The inquiry theme and relevant questions for validating the structured OCPASC are given in Table 2. The questionnaire was designed so that respondents could answer questions by selecting yes or no, or by selecting ratings from a 5-point Likert scale, which was introduced to obtain insights regarding levels of agreement on given sentences (sub-items).

<table>
<thead>
<tr>
<th>Inquiry theme - answer type</th>
<th>Items or examples</th>
<th>Results (%) for yes and mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Intention to provide certain types of information - Yes or No</td>
<td>- Issues that have to be considered by the client according to phases</td>
<td>84%</td>
</tr>
<tr>
<td></td>
<td>- Cost for a project in total and phase-based sub-totals</td>
<td>39%</td>
</tr>
<tr>
<td></td>
<td>- Duration for a project in total and phase-based sub-totals</td>
<td>93%</td>
</tr>
<tr>
<td></td>
<td>- Appropriate type of service providers according to phase</td>
<td>64%</td>
</tr>
<tr>
<td></td>
<td>- List of available service providers and references for them</td>
<td>66%</td>
</tr>
<tr>
<td></td>
<td>- Faithfulness of service providers in explanations of service contents</td>
<td>89%</td>
</tr>
<tr>
<td></td>
<td>- Monetary value of service</td>
<td>68%</td>
</tr>
<tr>
<td></td>
<td>- General level of satisfaction with service quality</td>
<td>86%</td>
</tr>
<tr>
<td>2. Reasons for reluctance to provide or obtain information according to - 5 point Likert scale</td>
<td>- Privacy matters</td>
<td>3.41</td>
</tr>
<tr>
<td></td>
<td>- No benefits for providing information</td>
<td>3.14</td>
</tr>
<tr>
<td></td>
<td>- Potential conflicts with the evaluated service provider</td>
<td>3.23</td>
</tr>
<tr>
<td></td>
<td>- Availability of off-line information</td>
<td>2.43</td>
</tr>
<tr>
<td>3. Expectations for acquisition of certain types of information according to - 5 point Likert scale</td>
<td>- Process of building projects</td>
<td>4.14</td>
</tr>
<tr>
<td></td>
<td>- Available quality of a building within the budget</td>
<td>4.19</td>
</tr>
<tr>
<td></td>
<td>- Criteria for selecting appropriate service providers</td>
<td>4.28</td>
</tr>
<tr>
<td></td>
<td>- Technology used for building</td>
<td>3.81</td>
</tr>
<tr>
<td>4. Aspects needed to enhance the performance of OCPASCs according to - 5 point Likert scale</td>
<td>- Specific information provided by independent professionals (e.g., cost of building materials)</td>
<td>4.18</td>
</tr>
<tr>
<td></td>
<td>- Sophisticated functions enabling users to search for exact information</td>
<td>4.11</td>
</tr>
<tr>
<td></td>
<td>- Involvement of a third party who can ensure the reliability of information and evaluations provided by users</td>
<td>3.98</td>
</tr>
<tr>
<td>5. Prerequisite for active participation in OCPASC according to - 5 point Likert scale</td>
<td>- Validation regarding reliability of information</td>
<td>3.93</td>
</tr>
<tr>
<td></td>
<td>- Popularity of web portal</td>
<td>4.02</td>
</tr>
<tr>
<td></td>
<td>- Availability of pre-contract consulting from service providers</td>
<td>3.91</td>
</tr>
<tr>
<td></td>
<td>- Incentives in the form of financial rewards</td>
<td>3.57</td>
</tr>
<tr>
<td>6. Expected change in customer power according to - 5 point Likert scale</td>
<td>- Easier process for selecting service providers based on reviews of evaluations from previous projects</td>
<td>4.16</td>
</tr>
<tr>
<td></td>
<td>- Greater control because service providers know that customers will evaluate them online</td>
<td>4.00</td>
</tr>
<tr>
<td></td>
<td>- Ability to compare costs and quality of service evaluations prior to selecting a purchasing service</td>
<td>3.84</td>
</tr>
</tbody>
</table>

5.2 Analysis of Respondents

Clients who were likely to participate in an OCPASC comprised the population sample for this study. One of challenges in the main survey is that no population of this specific client group exists. Thus, it was not possible to conduct random sampling. Furthermore, only members of existing online communities were likely to have insights regarding information streams in online communities. For these reasons, the main survey was conducted using voluntary participants from existing online communities.

A free online survey system, SurveyASP (www.surveyasp.com), was used to publicize and collect the responses to the questionnaire. The authors obtained assistance from sysops of two relatively large communities, each with more than 1,000 members, to attract respondents. A notice was posted to publicize the hyperlink to the online survey and explain briefly the purpose of the survey. Respondents to the main survey completed the questionnaire after reviewing video clips capturing the operation of the structured OCPASC.

Though 75 members visited SurveyASP and submitted answers, only 44 answered all questions; therefore, incomplete questionnaires were withdrawn.
Of the 44 respondents whose submissions were analyzed, 25 (56.8%) answered that they had experience in building projects. Thus, they were asked further questions regarding specific details of their projects. 85% of respondents mentioned that they would use the facility for their own occupation.

5.3 Analysis of Results and Discussion

The answers from respondents are analyzed in the right column of Table 2. Interpretation and discussion of data according to the inquiry theme follow.

5.3.1 Intention to Provide Information

In general, clients had positive opinions about providing information that reflected their experiences. The information items sorted according to the higher percentage of positive answers are as follows: duration (93%), faithfulness of service providers in explanation of service contents (89%), satisfaction level (86%), and phase-based issues, which the clients should check (84%). Potential clients were able to obtain information regarding the above relatively easily in the structured OCPASC. Value for money (68%) and lists/references of service providers (66%) followed. On the contrary, only 39% of respondents agreed that they would provide information on cost. Even in the structured OCPASC, information on cost is not likely to be shared among clients. Certainly, information on cost needs to be managed by a system manager who serves as the facilitator of an OCPASC.

5.3.2 Reasons for Reluctance

The highest mean value of respondents' ratings regarding reasons for reluctance to provide or obtain information is observed for the "privacy" item. However, this value does not indicate that respondents were negative about providing information due to privacy, given that the mean value of 3.41 reflects neutral intentions. On the other hand, the mean value for "availability of information off-line" was 2.43, which indicates that respondents agreed with the necessity for the structured OCPASC. The mean of "potential conflicts with the evaluated service provider" was 3.23; for "no benefits from providing information," the mean was 3.14.

5.3.3 Expectations

Mean values of all information items (i.e., around 4) suggest that respondents expected to become knowledgeable after obtaining information from the structured OCPASC. The usefulness of information on "criteria to select service providers" was supported with a mean value of 4.28. The market mechanism as the motivation for active involvement of all participants can be facilitated by supporting this expectation because the information on selecting service providers can be linked systematically to service encounters.

5.3.4 Aspects to Enhance the Performance of OCPASCs

As mentioned in the inquiry theme, "reasons for reluctance to provide or obtain information" imply that some types of information are not provided by clients, even in the structured OCPASC. In this case, a third party playing the role of facilitator should survey or investigate relevant data and upload them at appropriate subpages. Respondents seemed to agree with this approach, given that the mean value of the corresponding response was 3.81. A common challenge in online information searches is the overload of irrelevant information. The COPASC should have mechanisms (i.e. ontology or semantic web) to overcome this problem.

5.3.5 Prerequisite for Active Participation

Clients seemed to be more influenced by the culturalist perspective; in other words, "financial reward" ranked lower than three other categories. However, the mean value fell in the range between neutral and positive (i.e., 3.57). Respondents mentioned additional opinions on the facilitating framework, including less participation by service providers because of possible negative evaluations or little experiential information in the initial phase. Suggestions for improvement in this area include a strategy whereby the system manager would update experiential information through regular interviews with clients or service providers.

5.3.6 Expected Change in Customer Power

Respondents expected that they could compare the references of various service providers during service encountering phase and could maintain the customer power by means of references.

6. Conclusions

Online communities have the potential to provide useful information for clients and marketing opportunities for service providers. In Korea, a couple of communities for architectural service clients in which more than 1,000 members participate have been established and operated autonomously. Nevertheless, investigations regarding their usefulness and sustainability are lacking. Communities can only be useful when reliable information is provided. To this end, experienced and knowledgeable customers must be motivated to share credible information in the context of a community. To enhance the quality of information, an environment in which service providers with superior professional knowledge consult potential clients should be cultivated. Motivations for sharing information have been explored and explained according to three perspectives: rationalism, culturalism, and structuralism.

Preliminary investigations show that current autonomous OCPASCs do not allow service providers to involve, and they lack a systematic approach for sustaining information streams. Especially, the benefits for clients and service providers are not obvious. In other words, the structuralist perspective cannot be implemented unless a third party plays the roles of information designer and facilitator.
Theoretically, the hard systems approach should provide sustainability for the community and enhance the value of shared information. The approach can be implemented by structuring an OCPASC by means of a web portal consisting of subpages and DBMS. A prototype was developed to implement the schematic model of a structured OCPASC. A main survey was conducted after showing clients video clips capturing operation of the structured OCPASC. The respondents presented their intentions to provide information with less reluctance in the structured OCPASC.

Nonetheless, respondents expressed their expectations that the community framework would enhance the power of customers in the building industry based on practical revisions that would ensure financial benefits for sharing information, reinforce contents of provided information, and establish a sector for managing the reliability of information.

The theoretical contributions and findings of this research are as follows: (1) social action perspectives can contribute to exploring the motivations for sharing information in an OCPASC; (2) with social action perspectives, a schematic model to facilitate information streams can also be developed; and (3) information streams empower clients of professional architectural services to verify reputations of service providers and advance the quality of services through control effects.

The limitation of this research corresponds to the characteristics of research on information systems. In implementing the schematic model, the extent of facilitation could be measured only by the willingness of respondents rather than actual changes; thus, a survey is characterized by the potential gap between real action and response. In the near future, structured OCPASCs are expected to become popular; thus, data obtained from actual operations will be accumulated. The validation framework presented in this research can be applied to analyze future data sets.

Practically, the concept of a structured OCPASC presents a question on entrance barriers. Online evaluations tend to accelerate polarization between high-scoring and low-scoring companies. In this situation, small companies could be excluded systematically from competition. Even in online communities, approaches and methods for protecting and encouraging small service providers in start-up businesses are necessary. If the OCPASC provides a proper evaluation system, it can prompt existing service providers to differentiate their services from competitors.

References