Customers’ Prior Knowledge in the Servitization of Traditional Handicrafts

Bach Q. Ho

National Institute of Advanced Industrial Science and Technology, c/o Kashiwa II Campus, University of Tokyo, Kashiwa 277-0882, Japan; ho-ootori@aist.go.jp

Abstract: To enhance the competitiveness of the traditional handicraft industry, providers should offer service experiences using their products (i.e., servitization) instead of merely selling them. Effective management for servitization in the traditional handicraft industry must consider the differences in customers' prior knowledge. Nevertheless, previous studies have overlooked how this knowledge about traditional handicrafts impacts service experiences. This study explores which factors of consumer behavior (during services) and service outcomes (post-services) are affected by customers’ prior knowledge about a traditional handicraft. An organic food restaurant booth was provided at an annual summer festival about pottery as an experiment, and data were collected on customers’ meal experiences with a pottery plate through a questionnaire. The findings suggest that customers’ prior knowledge about a traditional handicraft promotes their search for information from service resources (i.e., organic foods) which are integrated with the traditional handicraft and their creativity during services, thereby changing their understanding of service resources and increasing satisfaction with service experience. This study contributes to services marketing by identifying the factors of during and post-services that are affected by customers’ prior knowledge about a traditional handicraft in the context of servitization.

Keywords: service experience; servitization; handicraft; services marketing; consumer behavior; experiential marketing; information search; prior knowledge; business model; customer satisfaction

1. Introduction

Traditional handicrafts have been viewed as a means of self-expression [1]. For example, displaying gorgeous pottery in one’s house can signal to guests the wealth and aesthetic sensibilities of the host. Traditional handicrafts satisfy consumers’ desires by being possessed and displayed and not necessarily by being used. Sales of traditional handicrafts have been driven by networking and competitive strategies of retailers [2]. However, the traditional handicraft market is threatened, and the industry is declining. Moreover, service experience through product use is increasingly important in the retail market [3,4]. To enhance the competitiveness of the traditional handicraft industry, providers should consider servitization by providing the use phase of their products in their business model [5,6].

Providing events for tourists is a valuable way for retailers to learn about the servitization process. Customers’ prior knowledge about products becomes even more important in services marketing in the traditional handicraft industry. Traditional handicrafts have a long history, and customers use their literacy to appreciate products [7]. The service process is mainly composed of three phases: pre-, during, and post-service [8]. Customers’ prior knowledge of the pre-services may affect their behavior during services—including information search and service experience—and outcomes of post-services—including changes in the understanding of resources and customer satisfaction. Servitization is a strategy adopted by manufacturing corporations to offer the process of using their product. Therefore, knowledge about the product will affect how customers behave in response to and experience a given product when it involves a new usage process. Furthermore,
knowledge about the product can enhance customer expectations, which affect their understanding of service resources and customer satisfaction as service outcomes. Nevertheless, previous studies on servitization have overlooked the impact of customers’ prior knowledge. In addition, traditional handcrafts as a research subject have been scarcely addressed in services marketing, despite customers’ prior knowledge about products being even more important in the context of servitization. Services marketing should explore how customers’ prior knowledge affects which factors of consumer behavior and service outcomes for effective servitization.

Thus, the present study aims to explore which factors of consumer behavior and service outcomes are affected by customers’ prior knowledge about a traditional handicraft. Two research questions (RQs) were posed to achieve the research purpose (Figure 1). RQ1: Which factors of information search and service experience during services are affected by customers’ prior knowledge about a traditional handicraft? RQ2: Which factors of change in understanding and customer satisfaction in post-services are affected by customers’ prior knowledge about a traditional handicraft? This study contributes to services marketing by identifying the impact of customers’ prior knowledge about traditional handcrafts on customers during and post-services in the context of servitization.

![Figure 1. Research framework.](image)

2. Literature Review

2.1. The Servitization of Traditional Handicrafts

Traditional handcrafts are used in ordinary life for artistic and traditional reasons [9]. They also function as a means for transferring knowledge and skills to future generations within the locality where the crafting skills originated and enhancing community sustainability [10]. The traditional handicraft industry can create a workforce of young people [11]. By transferring knowledge and skills to the next generation while creating labor, traditional handicrafts enhance community sustainability by circulating human and economic resources locally. However, the industry has declined due to globalization because the market requires providers to sell their products to a wider array of customers beyond local people, such as tourists. Industrialization has brought many inexpensive and convenient products to the market, causing consumers to prefer industrial products that are easy to replicate over expensive traditional handcrafts [12,13]. Furthermore, the knowledge artisans have developed through years of experience is challenging to transfer, making it difficult to mass-produce traditional handcrafts [14]. Therefore, the traditional handicraft industry has lost competitiveness. Providers should consider transforming their business model to sell services which are difficult to mass-produce and replicate.

Servitization refers to a strategy adopted by manufacturing corporations to offer market packages of customer-focused combinations of goods and services [5,15]. The
traditional handicraft industry has large potential for receiving benefits from servitization [5]. Selling service processes is easier than selling products to differentiate oneself from competitors [15]. Providers can effectively introduce the value of traditional handcrafts to customers by offering unique insights about the service experience of using products. Expanding contact with customers is expected to improve sales in the long term and product innovation [16]. Providing service experience through servitization has a positive influence on customer retention [17]. Servitization is also a process to transform the minds and capabilities of the providers [18]. Hence, importing customers’ knowledge in the servitization process is useful [19]. The servitization of traditional handcraft enterprises may contribute to social and cultural development in addition to economic growth [20]. Although there already exist several studies on the servitization of crafts [19,20], consumer behavior concerning servitization remains largely unexplored. Therefore, investigating consumer behavior in the servitization of traditional handicrafts is a critical research topic in services marketing.

2.2. Customers’ Prior Knowledge

Service design and management that enhance the service experience are essential to promote the servitization of traditional handicrafts, and effective strategies for service design and management must consider differences in customers’ prior knowledge. Differences in prior knowledge cause customers to behave and experience differently during services, subsequently affecting post-services benefits [21]. Traditional handicrafts have a long history and require specialized knowledge to appreciate their value [22,23]. Knowledge of culture is associated with traditional handicrafts [22]. Customers’ usage experiences and knowledge about traditional handicrafts affect the acceptance of product innovation [23].

Prior knowledge about a product affects customers’ information search [24]. While customers without appropriate prior knowledge are confused about what information to seek during services [25], sufficient prior knowledge encourages them to search for new information [26,27]. The benefits and costs of information search will affect customer information search behavior [26]. Objective knowledge suppresses information search about inappropriate product alternatives [27], although customers’ prior knowledge is not necessarily enhanced through the experiences of using products [28]. Customers with high prior knowledge can accurately determine the quality of products and compare them with alternatives [28,29]. Customers with low prior knowledge may have difficulties in learning from the new using process of products [29]. Moreover, customers with abundant prior knowledge are willing to process more in-depth information during services [30], increasing the quality of information sources they refer to for decision making [31]. Customers’ prior knowledge is not limited to information search but can also affect their service experience [32,33]. Customers’ prior knowledge has a positive influence on service quality [32]. Experiences of high-quality services are accumulated and become knowledge that improves further service experiences [33]. Therefore, exploring consumer behavior factors that are affected by customers’ prior knowledge is essential.

The quality of service experiences is enhanced as the quality of information search improves, resulting in greater customer satisfaction [34,35]. Information quality will lead to satisfaction with services as well as buying products [34]. Providers as a source of information are associated with service satisfaction [35]. Customer knowledge can also change their understanding of service resources [36]. Differences in prior knowledge affect consumer behavior during services. These variations lead to different knowledge acquisition and changes in the understanding of the resources used during services [37,38]. Customers’ prior knowledge affects how they understand service resources and change their attitude toward service providers [37]. Furthermore, the difference in prior knowledge is associated with information sources used in services [38]. Customers accumulate knowledge about resources through services and utilize the acquired knowledge in another service of a different context [39,40]. Service experiences support customers to gain a deep understanding.
of service resources and promote effective behavior in similar services [39]. Accumulated knowledge also comprises understanding of customer roles [40]. Consequently, the present study investigates how consumers’ prior knowledge effects service outcomes in addition to consumer behavior concerning the servitization of traditional handicrafts.

3. Methodology

3.1. Data Collection and Procedures

As a study of servitization of traditional handicrafts, we focused on the meal experiences at a festival of pottery called Kutaniyaki. Initially manufactured around 1700, Kutaniyaki is one of Japan’s most representative potteries and has been exported to many foreign countries [41]. Kutaniyaki has satisfied customer needs for displaying on a shelf in addition to using it for meals. Pottery is a typical traditional everyday handicraft incorporated into our lives in various shapes and styles worldwide [42,43]. Therefore, pottery is easily applicable for servitization [44]. In addition, restaurant service is a typical subject in service research [45–47]. For these reasons, we chose meal experiences with Kutaniyaki plates as the subject of the present study.

A union of Kutaniyaki retailers in the Ishikawa Prefecture in Japan holds an annual summer festival every year. However, they only sell pottery at a low price during the festival. To facilitate servitization in the industry, we persuaded retailers to offer a service experience with Kutaniyaki at the festival and discussed the contents of servitization with them over six months. In addition, we enlisted a catering company to prepare meals integrated with traditional handicrafts. Finally, a restaurant booth was set up at the festival as an experiment. Retailers lent Kutaniyaki plates, and the catering company provided organic foods and clerks to staff the booth. The restaurant’s concept was to provide organic foods served on Kutaniyaki plates. It was the first attempt to offer service experiences with Kutaniyaki at the festival. Data were collected on customers’ meal experiences through a questionnaire over two days.

The service flow in the experiment was as follows. First, the clerks distributed flyers showing the restaurant’s concept and explained the menu and ingredients of the meals to the customers. Next, the customers looked at the Kutaniyaki plates displayed on the table and chose a plate on which their food was to be served. Two food menus and five plate designs were offered. The clerks then arranged the food on the plate (Figure 2). Finally, the questionnaire was distributed to the customers who received their food.

Figure 2. Examples of organic foods on Kutaniyaki plates.

3.2. Questionnaire and Data Analysis

The questionnaire comprised five sections: prior knowledge, information search, service experience, change in understanding, and customer satisfaction. Prior knowledge assessed the previous experience of possessing and using Kutaniyaki according to previous studies that measured product experience as customers’ subjective knowledge [26,29]. We divided product experience into possessing and using to measure customers’ prior
knowledge levels. The information search comprised questions about the degree to which information was received from four sources of service experiences: clerks, the flyer, organic foods, and Kutaniyaki plates. Service experience involves the five directions of SENSE, FEEL, THINK, ACT, and RELATE, referring to experiential marketing [48]. The concept of experiential marketing has been used widely in marketing research to measure customer experience [49,50]. SENSE experience refers to the service experience that affects the customers’ five senses, asking how the dish stimulated their sense of taste. FEEL experience refers to the service experience that impacts customer emotions, asking how comfortable they feel in the restaurant booth. THINK experience refers to the service experience that engages customers’ thoughts, asking how creativity was stimulated by combining the food menu and Kutaniyaki plates. ACT experience refers to the service experience that addresses customers’ lifestyles, asking how the experience of eating organic food on Kutaniyaki plates fits into their daily lives. RELATE experience refers to the service experience that affects customer relationships, asking to what extent they could share their meal experience with others. Change in understanding was assessed using three questions about how customers’ thinking about organic food, Kutaniyaki, and lifestyle (i.e., eating foods with a Kutaniyaki plate) changed from pre- to post-services. Finally, customer satisfaction was examined using three questions: how pleased they were with the menu selection, the Kutaniyaki plate selection, and the meal. A five-point Likert scale was used for all questions except those measuring prior knowledge. All questions were presented in Japanese.

Customers with experience in both the possession and use of Kutaniyaki were categorized as the high-knowledge group, those with experience in either one were categorized as the medium-knowledge group, and those with no experience in either were categorized as the low-knowledge group. Statistical tests were used to examine the differences among the three groups and to analyze the impact of differences in prior knowledge during and post-services. We set a confidence level of 95% and a margin of error of 10%. Therefore, the minimum required sample size was calculated to be 97. SPSS (Version 25.0) was used for statistical analysis.

4. Results

The survey was conducted for two days, and 111 valid responses were collected. The average age of the respondents was 44.6 years, and 58.6% were female. Regarding the prior knowledge of the respondents, 87 respondents had possessing experience and 83 respondents had using experience; per the grouping criteria mentioned earlier, this resulted in 74 respondents being placed in the high-knowledge group, 22 in the medium-knowledge group, and 15 in the low-knowledge group (Table 1).

Table 1. Respondents’ prior knowledge about Kutaniyaki.

<table>
<thead>
<tr>
<th>Possessing Experience</th>
<th>No Possessing Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using experience</td>
<td>74 ¹</td>
</tr>
<tr>
<td>No using experience</td>
<td>13 ²</td>
</tr>
<tr>
<td></td>
<td>9 ²</td>
</tr>
<tr>
<td></td>
<td>15 ³</td>
</tr>
</tbody>
</table>

¹ high-knowledge group, ² medium-knowledge group, ³ low-knowledge group.

Regarding possessing experience, the results of the t-test revealed significant differences with THINK experience ($M_{possessing \text{ experience}} = 3.62$, $SD_{possessing \text{ experience}} = 1.08$ vs. $M_{no \text{ possessing \text{ experience}} = 2.57$, $SD_{no \text{ possessing \text{ experience}} = 1.12}$; $p < 0.01$) and cognitive change of organic foods ($M_{possessing \text{ experience}} = 3.69$, $SD_{possessing \text{ experience}} = 1.16$ vs. $M_{no \text{ possessing \text{ experience}} = 3.05$, $SD_{no \text{ possessing \text{ experience}} = 1.25}$; $p < 0.05$), and marginally significant differences with information search from the flyer ($M_{possessing \text{ experience}} = 3.15$, $SD_{possessing \text{ experience}} = 1.32$ vs. $M_{no \text{ possessing \text{ experience}} = 2.64$, $SD_{no \text{ possessing \text{ experience}} = 1.44}$; $p < 0.1$) and from organic foods ($M_{possessing \text{ experience}} = 3.79$, $SD_{possessing \text{ experience}} = 1.10$ vs. $M_{no \text{ possessing \text{ experience}} = 3.27$, $SD_{no \text{ possessing \text{ experience}} = 1.24}$; $p < 1$). In contrast, only significant differences with THINK experience ($M_{possessing \text{ experience}} = 3.54$, $SD_{possessing \text{ experience}} = 1.11$ vs. $M_{no \text{ possessing \text{ experience}} = 3.00$, $SD_{no \text{ possessing \text{ experience}} = 1.23}$; $p < 0.05$) were revealed regarding using experience.
The Kolmogorov–Smirnov test was used to determine whether the variables followed a normal distribution, and the results indicated that all variables did not follow a normal distribution. Therefore, the Kruskal–Wallis test was conducted as an unpaired nonparametric test. In addition, the Mann–Whitney U test was used to examine the differences between the high- and low-knowledge groups; Table 2 displays the related results. Compared with the low-knowledge group, the high-knowledge group had significantly higher scores in information search from organic foods, THINK experience, change in the understanding of organic foods, and meal satisfaction ($p < 0.05$). Significant differences in the cognitive change of lifestyle and satisfaction with the meal did not appear in the separate t-tests conducted for possession and using experience. In other words, a larger difference in prior knowledge particularly facilitated the recognition that using traditional handicrafts in daily life is good and enhanced meal satisfaction in the restaurant booth.

### Table 2. Statistical test results with prior knowledge differences.

<table>
<thead>
<tr>
<th></th>
<th>Average (Standard Deviation)</th>
<th>$p$-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High ($n = 74$)</td>
<td>Medium ($n = 22$)</td>
</tr>
<tr>
<td>Information search from clerks</td>
<td>3.34 (1.19)</td>
<td>3.95 (0.95)</td>
</tr>
<tr>
<td>Information search from the flyer</td>
<td>3.23 (1.30)</td>
<td>2.59 (1.30)</td>
</tr>
<tr>
<td>Information search from organic foods</td>
<td>3.76 (1.15)</td>
<td>3.77 (1.15)</td>
</tr>
<tr>
<td>Information search from Kutaniyaki plates</td>
<td>3.81 (1.26)</td>
<td>3.82 (1.26)</td>
</tr>
<tr>
<td>SENSE experience</td>
<td>4.45 (1.24)</td>
<td>4.27 (1.24)</td>
</tr>
<tr>
<td>FEEL experience</td>
<td>3.86 (1.11)</td>
<td>3.77 (1.11)</td>
</tr>
<tr>
<td>THINK experience</td>
<td>3.60 (0.96)</td>
<td>3.41 (0.96)</td>
</tr>
<tr>
<td>ACT experience</td>
<td>4.34 (0.70)</td>
<td>4.27 (0.70)</td>
</tr>
<tr>
<td>RELATE experience</td>
<td>3.74 (1.15)</td>
<td>3.77 (1.15)</td>
</tr>
<tr>
<td>Cognitive change of organic foods</td>
<td>3.67 (1.21)</td>
<td>3.55 (1.10)</td>
</tr>
<tr>
<td>Cognitive change of Kutaniyaki</td>
<td>3.54 (1.22)</td>
<td>3.82 (1.05)</td>
</tr>
<tr>
<td>Cognitive change of lifestyle</td>
<td>3.84 (1.23)</td>
<td>3.91 (0.75)</td>
</tr>
<tr>
<td>Satisfaction with menu selection</td>
<td>3.91 (1.23)</td>
<td>4.05 (1.07)</td>
</tr>
<tr>
<td>Satisfaction with choosing Kutaniyaki plates</td>
<td>4.37 (1.10)</td>
<td>4.23 (1.15)</td>
</tr>
<tr>
<td>Satisfaction with the meal</td>
<td>4.46 (0.96)</td>
<td>4.59 (0.50)</td>
</tr>
</tbody>
</table>

### 5. Discussion

#### 5.1. Theoretical Implications

First, the present study found that in the servitization of traditional handicrafts, differences in customers’ prior knowledge led to differences in their information search during the service. The findings indicate that customers with high prior knowledge of Kutaniyaki are more likely to seek information about the food during the services than those with low prior knowledge of Kutaniyaki. Moreover, our findings imply that promoting information search during services can stimulate customers’ creativity, understanding of food, and satisfaction with their meals. The result that service information enhances customer satisfaction is consistent with previous research [35]. Prior experiences possessing and using traditional handicrafts familiarize customers with traditional handicrafts and allow them to focus on other resources used during services along with the traditional
handicrafts [51]. In contrast, customers who experience traditional handicrafts for the first time during the service are initially careful with them to reduce the risks associated with unfamiliar resources [52]. The present study contributes to services marketing by revealing how customers’ prior knowledge of traditional handicrafts affects their information search during services.

Second, the findings indicate that differences in customers’ prior knowledge affect the THINK experience—a particularly creative part of the service experience. This result is consistent with previous research showing that THINK experiences are more likely to lead to perceived value among service experiences [53]. Customers were asked to select a combination of food from a menu and a Kutaniyaki plate in the present study. Bell et al. argued that customers are more concerned with service outcomes when they have extensive knowledge of the resources used [54]. Therefore, customers with high prior knowledge might apply their knowledge to create a better combination of the food menu and Kutaniyaki plate. Customers who are familiar with traditional handicrafts could expand their thinking by requiring knowledge application in the context of servitization, thereby increasing their satisfaction [55,56]. By identifying which service experiences are more likely to be aroused by differences in customers’ prior knowledge of the servitization of traditional handicrafts, the present study contributes to consumer behavior research.

Third, the findings revealed that differences in customers’ prior knowledge of traditional handicrafts affect their understanding of another service resource integrated with traditional handicrafts during services. Customers with more prior knowledge of traditional handicrafts will gain new awareness of another service resource through enhanced information search during the service, and the meaning of the resource in daily life will change. That is, the value of organic foods for customers was changed. For example, customers may not fully appreciate the value of organic foods in their daily lives but feel closer to them after these meal experiences. Servitization to directly deliver value in using traditional handicrafts to customers promotes product permeation into the daily lives of customers [8,57]. As traditional handicrafts permeate daily lives, using the product deepens the understanding of the resources integrated with them. Our findings suggest that the understanding of organic foods by customers who are knowledgeable about Kutaniyaki will change through these service experiences. They may be encouraged to seek more information about and actively consume organic foods on a daily basis. The benefit of changing customers’ minds through service experiences is the transformative value [56]. Customers can increase their well-being beyond increasing satisfaction by gaining the transformative value of changing their understanding of service resources [58,59]. The present study contributes to services marketing by demonstrating that the meaning of the service resource integrated with traditional handicrafts can be changed by introducing servitization.

5.2. Practical Implications

Our findings suggest that designing services for customers with different prior knowledge of traditional handicrafts is essential. Customer satisfaction can be enhanced by providing customer experiences that stimulate their thinking and creativity, especially for those already familiar with traditional handicrafts. Conversely, for customers who have never experienced traditional handicrafts before, communicating providers’ passion for traditional handicrafts is more compelling [60]. While sufficient knowledge of traditional handicrafts allows customers to process useful information during services, emotional cues such as empathy and service attitude from clerks influence perceived service quality and satisfaction [61,62]. Therefore, according to customers’ prior knowledge, multi-channel management is essential for enhancing the sustainability of the traditional handicraft industry [63].

Customers’ prior knowledge promotes their information search for resources integrated with traditional handicrafts (i.e., foods) during services. Therefore, collaboration with other product industries is useful for traditional handicraft providers who are introducing servitization. If such services are offered, customers who are familiar with
traditional handicrafts will be more interested in the collaborator’s products. Moreover, customers familiar with the collaborator’s products may be interested in traditional handicrafts. Synergistic benefits can be expected from servitization because the providers of the traditional handicraft industry have difficulty offering rich experiences with their resources alone. Only by collaborating with other industries can they provide a meaningful customer experience [64]. Collaboration across industries facilitates the development of new customers, fulfilling customer needs and product innovation [65–67].

Our findings indicate that providers can enhance satisfaction with service experiences if customers know more about traditional handicrafts in advance. Therefore, customer education and product promotion are vital for management strategy. As value is co-created through the active cooperation of customers with service providers, their learning is crucial in services marketing [68,69]. Customer education improves perceived service quality as they become more proficient with the services [70]. Therefore, providers of traditional handicrafts should enhance their communication with customers in pre-services, particularly in servitization. Furthermore, positive word of mouth can be expected to spread if customer education is successful [71]. However, there is a risk that excessive customer education will lead customers to undervalue clerks. Therefore, providers must communicate their philosophy regarding customer relationships in education programs [72].

5.3. Limitations and Future Directions

As with other studies, this study has several limitations. First, the generalizability of the findings is limited because of the participant type and sample size. This was due to the nature of the experiment on real services. This study investigated a combination of pottery and food and found that differences in customers’ prior knowledge had an impact during and post-services. Nonetheless, further analysis of the combination of other resources is needed to increase the generalizability of the results. For example, we can enhance the generality of the effect of pottery as a traditional handicraft by examining the effect of flowers as a resource to combine with pottery (ornamental plants) instead of organic foods.

The second limitation concerns customer typology. This study classified the richness of prior knowledge into three groups to identify customer differences. In the future, a more detailed categorization of the richness of knowledge would improve our understanding of how differences in customers’ prior knowledge affect their experience [31,73]. Classification with objective knowledge may also be useful because the present study only investigated subjective knowledge. In addition, investigating how proficient the customer has become with the resources used in services is essential [74].

Third, this study was limited to a quantitative analysis. This study demonstrated that the servitization of traditional handicrafts can improve customers’ quality of life and well-being in addition to conveying the value-in-use of products. A qualitative analysis of customer experience will provide a deeper understanding of the process of how they search for information during the services and insight into the information-processing mechanism and change in their understanding [75]. By clarifying this mechanism, providers can enhance the provision of information directly related to improving the customer’s well-being.

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