EFFECTS OF SERVICE INNOVATION ON ORAL SPREADING AND CONSUMPTION INTENTION IN CATERING INDUSTRY

Jeng-Hwan WANG, Jiun-Lan HSU


The online version of this article can be found at:
Effects of Service Innovation on Oral Spreading and Consumption Intention in Catering Industry

Jeng-Hwan WANG¹, Jiun-Lan HSU²

Abstract

The global competition has forced domestic manufacturers moving outward. Catering and service industries are then increasing the weight in domestic industrial structure. The growing production and scale of catering and service industries has exceeded the weight of manufacturing industries in advanced countries. Developing innovative activities therefore enhances the importance on national economic growth. There have been some research on Service Innovation domestically and internationally; however, the effects of Oral Spreading on the correlations between innovation and performance are little discussed. For this reason, the correlations between innovation and performance in catering industry in Taiwan are explored in this study. The customers of Grand Hi-Lai Hotel are selected as the research participants, to whom total 300 copies of questionnaires are distributed. Having deducted invalid and incomplete copies, 196 valid copies are retrieved, with the retrieval rate 65%. The research results reveal 1. partially significant correlations between Service Innovation and Oral Spreading, 2. remarkable correlations between Oral Spreading and Consumption Intention, 3. notable correlations between Service Innovation and Consumption Intention, and 4. mediating effects of Oral Spreading on the correlations between Service Innovation and Consumption Intention.

Keywords: Service Innovation, Oral Spreading, Consumption Intention, catering industry

¹ Department of Food and Beverage Management, Mackay Junior College of Medicine, Nursing and Management, Taipei, TAIWAN, ROC. E-mail: s319@eip.mkc.edu.tw
² Department of Food and Beverage Management, Taipei College of Maritime Technology, Taipei, TAIWAN ROC E-mail: f0837@mail.tcmt.edu.tw (Corresponding author)
Research background

According to 2012 Statistics of Directorate-General of Budget, Accounting and Statistics, Executive Yuan, the output value of service industries has presented the weight over 83% of GDP in Taiwan. The rapid growth of service industries has it be the key industry in domestic economic growth. Catering industry in service industries increased 385.5 billion dollars in 2012 (Department of Statistics, Ministry of Economic Affairs, 2012). However, the fierce competition in the same industry is annually reducing the sales amount of various catering businesses in Taiwan. To cope with such an environment and enhance the competitiveness, catering businesses have to focus on products and service innovation. In such a rapidly changing environment, innovation is essential for catering industry maintaining the competitive advantages. For catering industry in Taiwan, innovation reveals the core capability. Drucker (1985) proposed “Innovate, or die” and considered that innovation was to change the value and satisfaction of resources for customers. Schumpeter (1934), who first proposed the idea of innovation, regarded innovation as the motivation of economic growth, with which an enterprise effectively utilized resources for satisfying the market demands. In the innovation theory, Schumpeter (1934) defined innovation as developing invented matters into socially acceptable and commercially valued activities and considered innovation as the implementation of new compositions. In the 21st century, Innovation has become a key factor in corporate competitiveness. In order to remain the development and competitive advantages of enterprises in Taiwan, where the weight of catering industry is rapidly growing, Service Innovation becomes a critical issue.

Definition and hypothesis

Service Innovation

Service Innovation is mostly regarded as to cope with the dilemma of increasing competitors and decreasing profits that new creativities and ideas are developed based on new technology to integrate the market demands and further improve and revise present products and intangible labor (Zhang & Duan, 2006; Djellal and Gollouj, 2001; Drejer, 2004; Vang & Zellner, 2005; Kotler, 2003). Johnson, Menor & Chase (2000) regarded new services as being able to provide customers with services, which could not be offered before, because of increasing services, advanced technology, and changed service delivery, or brand-new perception with newly developed service products or service delivery. Drejer (2004) indicated that, in addition to the successful development of new services and new products, Service Innovation also included all innovative activities which could
revise and improve present products, services, and delivered systems. Service Innovation referred to an enterprise enhancing the product or service value by improving the services and coping with diverse demands of customers (Vang & Zellner, 2005). Bilderbeek & Hertog (1998) proposed the representative Four Dimensions for Service Innovation, which could analyze various types of Service Innovation, to measure the competitiveness of an enterprise. (1) Service Concept. Service innovation could be delivered to customers through various intangible and tangible services. As a perception or special appointment (such as concepts, ideas, and problem solution), it could be apparent (like holiday banks), but often intangible and abstract. (2) Client Interface referred to transforming marketing process into continuously interactive behaviors with customers. It could rapidly respond to customer demands, generate close connection with customers in the information exchange and interactive process, and enhance the relationship between an enterprise and the customers. In this case, an enterprise should provide proper communication media when facing distinct customer demands. (3) Service Delivery. The intangible output of services must be delivered to the customers through the delicate design of Service Delivery System. Delivering service quality, as the task of Service Delivery System, allowed customer expectation being consistent with perceived quality. (4) Technological Options. A lot of researchers did not consider technology as the essential option of Service Innovation, as new techniques (or technology) were not necessarily required for Service Innovation.

**Oral Spreading**

Oral Spreading is the face-to-face communication behavior without commercial purposes, in which the information exchange through specific product or service discussions could affect consumers’ evaluation and consumption intention. Oral Spreading therefore is considered as autonomic, reliable, and trustable information with enormous spreading and influence that it has been emphasized and studied academically and practically (Bansal & Voyer, 2000; Wirtz & Chew, 2002). Reynolds and Arnold (2000) defined Oral Spreading as suggesting or telling others about the transaction with a salesperson and/or a store. Harrison-Walker (2001) defined Oral Spreading as informal and person-to-person communication between non-profit spreaders and receivers aiming at certain brand, product, organization, or service. Brown, Barry, Dacin and Gunst (2005) believed the basic concept of Oral Spreading as a customer delivering information about products, services, stores, or companies to another customer; broadly speaking, the information spread objects were not merely individuals, but also contained the media. From the aspect of customer complaints, Davidow (2003) defined Oral Spreading as the intention or behavior of a customer complaining the unsatisfactory experiences to others. According to the above points of view, people are the major media of Oral Spreading who are the third party without interests in the business. Without interests in businesses, the information receivers could better
accept and believe in the contents and further precede spreading behaviors. Oral Spreading Intention refers to the willingness to precede oral spreading behaviors. Referring to Dichter (1966), Westbrook (1987) divided Oral Spreading into (1) Product Spreading, a user tending to discuss about a purchase experience and the pleasure acquired, (2) Self-Spreading, a user tending to look for others’ attention, approval, or concern about a purchase experience, and (3) Other Spreading, a user helping other consumers by sharing the knowledge or experiences.

**Consumption Intention**

Gilly *et al.* (1998) considered three factors in the consumption intention of oral information receivers, including (1) characteristics of information sources, such as the professionalism of information sources and opinion leadership, (2) homogeneity of searchers and sources, and (3) characteristics of oral searchers, such as professionalism and oral preference. Dodds *et al.* (1991) and Schiffman & Kanuk (2000) indicated that Consumption Intention was the possibility of a consumer being willing to purchase a product. Armstrong (2000) regarded the prediction with Consumption Intention being more easily deducted than it with sales trend in the past. Fandos & Flavian (2006) mentioned that Consumption Intention could reflect the predictable behaviors of consumers, i.e. the purchase decision in a short period of time. In other words, Consumption Intention could be applied to predicting the purchased products or brand of a consumer. Spears & Singh (2004) pointed out Consumption Intention as the effort of an individual intentionally purchasing the products of certain brand. A consumer presenting favorable perception or impression on certain products or brand might appear successive Consumption Intention. Schiffman & Kanuk (2000) proposed five dimensions for measuring consumers’ Consumption Intention, covering I would absolutely buy it, I might possibly buy it, I am not of buying it, I might not possibly buy it, and I would never buy it. Zeithaml *et al.* (1996) measured consumers’ Consumption Intention with loyalty, conversion, willing to pay, external reaction, and internal reaction. Summing up the dimensions of Schiffman & Kanuk (2000) and Zeithaml *et al.* (1996), loyalty and recommendation for others are selected as the bases to measure Consumption Intention for the suitable questionnaire.
Research hypothesis

It is discovered in many studies that interpersonal information plays a primary role in product selection or information spread of new products. It is also proven that interpersonal interaction has consumers voluntarily share consumption experiences with others and be free product endorsers. Such information, mostly considered reliable or important, presents stronger persuasion than the one from other channels. Yang (2002) pointed out innovative services as service providers offering technology, professionalism, knowledge, information, facilities, time, or space for customers, expecting to deal with certain affairs for customers, solving some problems or entertaining customers, serving customers, and cheering up customers; and, customer satisfaction after the consumption was normally the antecedent of Oral Spreading Intention. Swan and Oliver (1989) also discovered that the higher customer satisfaction would enhance Oral Spreading Intention. Ranaweera and Prabhu (2003) found out the higher Oral Spreading Intention from the higher customer satisfaction. The following hypothesis is therefore proposed in this study.

H1: Service Innovation presents significant correlations with Oral Spreading. Pan et al. (2007) also mentioned that oral spreading could better reduce perceived risks and enhance purchase intention when consumers faced expensive products or services with higher uncertainties. Zehrer et al. (2011) proposed the effects of blog information on the purchase decision of tourism products; however, altruistic behaviors could result in negative word-of-mouth that Oral Spreading appeared remarkable effects on Consumption Intention (Sundaram, Mitra & Webster, 1998). The following hypothesis is then established.

H2: Oral Spreading reveals notable correlations with Consumption Intention. Current domestic and international research on Service Innovation and consumers’ Consumption Intention revealed the positively significant correlations. Roy & Cornwell (2003) also indicated that constant product development not only could attract customers, but could also enhance consumers’ purchase intention through Oral Spreading. Gabor Rekettye (2009) mentioned that Service Innovation could enhance customer commitment and customer loyalty. Danneels & Kleinschmidt (2001) considered that Oral Spreading allowed customers knowing new products or new services and further stimulated the purchase behaviors. The following hypotheses are therefore established in this study.

H3: Service Innovation shows remarkable correlations with Consumption Intention.

H4: Oral Spreading appears mediating effects on the correlations between Service Innovation and Consumption Intention.
Conceptual framework and research design

Conceptual framework for this study

The conceptual framework (Figure 1) for this study is drawn by summing up the above literatures in order to discuss the correlations among Service Innovation, Oral Spreading, and Consumption Intention.

Research participant

Grand Hi-Lai Hotel was completed in 1995. The professional aesthetic building presents the management with international standards. The artistic neo-classic-styled structure has become the landmark in southern Taiwan since the establishment. Grand Hi-Lai Hotel provides best-quality services with international accommodation quality and international cuisine that it has been proud of the professional services. Located in the metropolitan area of Kaohsiung City, the 186m Grand Hi-Lai Hotel allows visitors viewing the great Kaohsiung City. The luxury internal furnishings and the considerate services have created wonderful experiences for visitors. The customers of Grand Hi-Lai Hotel, as the research participants, are distributed 300 copies of questionnaires. Having deducted invalid and incomplete ones, 196 valid copies are retrieved, with the retrieval rate 65%.

Analysis

Regression Analysis is utilized in this study for understanding the correlations among Service Innovation, Oral Spreading, and Consumption Intention.
Analysis and discussion

Factor Analysis of Service Innovation

With Factor Analysis, Service Innovation Scale was extracted the factors of Service Concept (eigenvalue=3.442, $\alpha=0.81$), Client Interface (eigenvalue=2.538, $\alpha=0.82$), Service Delivery (eigenvalue=1.697, $\alpha=0.87$), and Technological Options (eigenvalue=1.342, $\alpha=0.85$). The covariance explained achieved 78.319%.

With Factor Analysis, Oral Spreading Scale was extracted the factors of Product Spreading (eigenvalue=2.833, $\alpha=0.84$), Self-Spreading (eigenvalue=2.271, $\alpha=0.83$), and Other Spreading (eigenvalue=1.423, $\alpha=0.86$). The covariance explained reached 81.827%.

With Factor Analysis, Consumption Intention Scale showed eigenvalue=4.136, $\alpha=0.90$, and the covariance explained achieved 76.519%.

Correlation Analysis of Service Innovation and Oral Spreading

Multiple Regression Analysis was applied to testing the hypotheses and the theoretical framework. The first regression analysis, Table 1, showed the regression equation reaching the significance ($F=19.854$, $p<0.001$). Service Innovation appeared notable effects on Product Spreading, where Service Concept, Client Interface, and Service Delivery in Service Innovation presented remarkably positive effects on Product Spreading in Oral Spreading, reaching the significance ($B=1.637$, $p=0.036$; $B=1.833$, $p=0.016$; $B=1.762$, $p=0.021$).

The second regression analysis, Table 1, revealed the regression equation achieving the significance ($F=24.887$, $p<0.001$). Service Innovation presented notable effects on Self-Spreading, where Service Concept, Client Interface, and Service Delivery in Service Innovation showed notably positive effects on Self-Spreading in Oral Spreading, reaching the significance ($B=1.538$, $p=0.046$; $B=1.933$, $p=0.011$; $B=1.697$, $p=0.032$).

The third regression analysis, Table 1, presented the regression equation reaching the significance ($F=28.342$, $p<0.001$). Service Innovation appeared remarkable effects on Other Spreading, where Service Concept, Client Interface, Service Delivery, and Technological Options in Service Innovation revealed remarkably positive effects on Other Spreading in Oral Spreading, achieving the significance ($B=1.871$, $p=0.013$; $B=2.137$, $p=0.000$; $B=2.069$, $p=0.003$; $B=1.792$, $p=0.019$). H1 was therefore partially agreed.
Table 1: Regression Analysis of Service Innovation and Oral Spreading

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Oral Spreading</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Product Spreading</td>
</tr>
<tr>
<td>Service Innovation</td>
<td>( \beta )</td>
</tr>
<tr>
<td>Service Concept</td>
<td>1.637*</td>
</tr>
<tr>
<td>Client Interface</td>
<td>1.833*</td>
</tr>
<tr>
<td>Service Delivery</td>
<td>1.762*</td>
</tr>
<tr>
<td>Technological Options</td>
<td>1.277</td>
</tr>
<tr>
<td>F</td>
<td>19.854</td>
</tr>
<tr>
<td>P</td>
<td>0.000***</td>
</tr>
<tr>
<td>R2</td>
<td>0.233</td>
</tr>
<tr>
<td>Adjusted R2</td>
<td>0.019</td>
</tr>
</tbody>
</table>

Note: * stands for \( p<0.05 \), ** for \( p<0.01 \).

Correlation Analysis of Service Innovation and Oral Spreading towards Consumption Intention

Multiple Regression Analysis was utilized for testing the hypotheses and the theoretical framework. The first regression analysis, Table 2, showed the regression equation reaching the significance (\( F=26.735, p<0.001 \)). Service Innovation showed notable effects on Consumption Intention, where Service Concept, Client Interface, Service Delivery, and Technological Options in Service Innovation presented significantly positive effects on Consumption Intention, achieving the significance (\( B=1.937, p=0.010; B=2.116, p=0.000; B=2.247, p=0.000; B=1.887, p=0.014 \)) that H3 was agreed.

The second regression analysis, Table 2, revealed the regression equation reaching the significance (\( F=31.422, p<0.001 \)). Oral Spreading appeared remarkable effects on Consumption Intention, where Product Spreading, Self-Spreading, and Other Spreading in Oral Spreading showed remarkably positive effects on Consumption Intention, achieving the significance (\( B=2.093, p=0.000; B=2.107, p=0.000; B=2.342, p=0.000 \)) that H2 was agreed.
Table 2: Regression Analysis of Service Innovation and Oral Spreading

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Independent variable</th>
<th>Consumption Intention</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Service Innovation</td>
<td>β</td>
</tr>
<tr>
<td>Service Concept</td>
<td>1.937*</td>
<td>0.010</td>
</tr>
<tr>
<td>Client Interface</td>
<td>2.116**</td>
<td>0.000</td>
</tr>
<tr>
<td>Service Delivery</td>
<td>2.247**</td>
<td>0.000</td>
</tr>
<tr>
<td>Technological Options</td>
<td>1.887*</td>
<td>0.014</td>
</tr>
<tr>
<td>Oral Spreading</td>
<td>Product Spreading</td>
<td>β</td>
</tr>
<tr>
<td></td>
<td>2.093**</td>
<td>0.000</td>
</tr>
<tr>
<td>Self-Spreading</td>
<td>2.107**</td>
<td>0.000</td>
</tr>
<tr>
<td>Other Spreading</td>
<td>2.342**</td>
<td>0.000</td>
</tr>
<tr>
<td>F</td>
<td>26.735</td>
<td>31.422</td>
</tr>
<tr>
<td>P</td>
<td>0.000***</td>
<td>0.000***</td>
</tr>
<tr>
<td>R2</td>
<td>0.241</td>
<td>0.277</td>
</tr>
<tr>
<td>Adjusted R2</td>
<td>0.031</td>
<td>0.037</td>
</tr>
</tbody>
</table>

Note: * stands for p<0.05, ** for p<0.01.

Mediating effects of Service Innovation and Oral Spreading on Consumption Intention

With Hierarchical Regression Analysis, the mediating effects of Oral Spreading are shown in Table 3, where Service Innovation revealed notable explanation of Consumption Intention (F=26.735, p<0.001). Based on the effects of Service Innovation and Oral Spreading on Consumption Intention in Model 2 to discuss the mediating effects of Oral Spreading, β value of Service Concept remarkably dropped from 1.937 (p<.05) down to 1.875 (p<.05), showing that Oral Spreading would reduce the direct effects of Service Concept on Consumption Intention. β value of Client Interface notably dropped from 2.116 (p<.01) down to 2.042 (p<.01), presenting that Oral Spreading would reduce the direct effects of Client Interface on Consumption Intention. β value of Service Delivery notably dropped from 2.247 (p<.01) down to 2.123 (p<.01), revealing that Oral Spreading would reduce the direct effects of Service Delivery on Consumption Intention. β value of Technological Options significantly dropped from 1.887 (p<.05) down to 1.734 (p<.05), showing that Oral Spreading would reduce the direct effects of Technological Options on Consumption Intention. The research results revealed the
mediating effects of Oral Spreading on the correlations between Service Innovation and Consumption Intention that H4 was agreed.

Table 3: Hierarchical Regression of Service Innovation and Oral Spreading towards Consumption Intention

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Consumption Intention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service Innovation</td>
<td>β</td>
</tr>
<tr>
<td>Service Concept</td>
<td>1.937*</td>
</tr>
<tr>
<td>Client Interface</td>
<td>2.116**</td>
</tr>
<tr>
<td>Service Delivery</td>
<td>2.247**</td>
</tr>
<tr>
<td>Technological Options</td>
<td>1.887*</td>
</tr>
<tr>
<td>Oral Spreading</td>
<td></td>
</tr>
<tr>
<td>Product Spreading</td>
<td></td>
</tr>
<tr>
<td>Self-Spreading</td>
<td></td>
</tr>
<tr>
<td>Other Spreading</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>26.735</td>
</tr>
<tr>
<td>P</td>
<td>0.000***</td>
</tr>
<tr>
<td>R2</td>
<td>0.241</td>
</tr>
<tr>
<td>Adjusted R2</td>
<td>0.031</td>
</tr>
</tbody>
</table>

Note: * stands for $p<0.05$, ** for $p<0.01$.

Conclusion

In this study, Service Innovation actually appears remarkable effects on Purchase Intention that the presentation of Service Innovation could enhance customers’ Purchase Intention. Service Innovation aims to improve the technology or processes, based on customer perception or demands, and the ultimate objective is to have customers continuously consume and purchase. Research on the correlations between Service Innovation and consumers’ Purchase Intention mostly reveal the significantly positive correlations.
From the relevant research, the application and spreading of innovation allow customers knowing new products or new services and further stimulate the purchase behaviors. As previously mentioned, Service Innovation aims to satisfy customer demands which have not been satisfied. When customer demands are found out, the customers would be stimulated the consumption for satisfaction. In addition to the basic catering functions, the overall service provision (including meal information inquiry and dining environments) and the expansion of diverse catering products in Service Innovation are the factors in enhancing Purchase Intention and attracting more consumers.

**Suggestion**

From the research results on Service Innovation, Oral Spreading, and Consumption Intention in catering industry, Service Innovation appears great importance that the following suggestions are further proposed. The service staff is suggested to include greetings when leading customers to the seats and actively concern about the dining situation. The 0800 free call or e-mail address could be shown at an obvious place; or, induce customers to fill in Customer Opinion Investigation for inquiry or communication. Catering businesses should participate in public welfare and apply for excellent service certification as well as actively participate in public welfare and assist in meaningful activities locally so as to enhance the brand image and promote customers’ Oral Spreading. Furthermore, customers’ sensitivity to prices could be reduced by issuing coupons for local citizens, promoting daily meal with special offer, selling beneficial combination, and allowing collecting coupons for gifts.

Catering businesses should participate in local welfare and apply for excellent service certificate to enhance the brand image. Bamboo, pottery, or china tableware is recommended, and the service staff should wear uniforms to show the grace manner. Meanwhile, the standard service procedure should be established so as to ensure the quality and speed. Besides, it is also important to interact with customers during the meal. Catering businesses should establish standard service procedure to visualize the production process and ensure the food security. The service behaviors of service staff should also present consistency which could be practiced by monthly selection of the optimal service staff or irregular on-site evaluation. What is more, reservation could be increased to improve the spatial utilization.
References


