Service Innovation Involved by Employees and Customers: From Conceptual Model to an IT Service Case*

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Abstract With the service industry and information technology developing, Service innovation occurs continually in business today. It is important for service firms to understand the service’s business and process; customer knowledge including needs, expectations and experiences. However, employees are key factor to collect the customer’s advice. At the same time, employees may organize customers for the new service. So, the integration of employees and customers will help service firm in the way of developing a new service and upgrading a service. The paper describes some models to explain the relation based on some literatures and give some advices for service firms. At last, we introduce an IT service case

Key words service innovation; involving of employees and customers; IT service case

Service industry becomes more and more important in the economic life. The problem of service innovation is an important topic in the field of innovation[1-6, 13, 14]. There were many products of the service innovation in the last decade, but the service innovation research does not enter to the scholarly research main category completely. Generally, there are not special research departments for service innovation in the service firm. The service innovation happens frequently with the service delivery process. Because the service product and the service delivery process often synchronize. The service firm doesn’t generally use the terminology of service innovation. They describe the category of innovation with customer satisfaction, quality improvement and so on[6-7]. Frequent commerce activity and the market demand also are sources of the service innovation. The service innovation is not emergence suddenly but continuous and complex alternately [8]. These viewpoints for service innovation definition expand the field of vision. Toivonen and Tuominen reviewed many literatures and summarized service innovation and service innovation process. The service innovation is a new service or such a renewal of an existing service which is put into practice and which provides benefit to the organization that has developed it; the benefit usually derives from the added value that the renewal provides to the customers [10].

The above-mentioned literatures give us some point of view. The process of service innovation is complicated and is supported by human resource, network and organization like technology innovation. Employees and customers in service firms are important during producing, propagating, applying, studying of new service resulting from the innovation. So, service innovation process needs employee (including front-line employees and manager) and customers participated in. This paper is structured as follows. In the first section, we briefly summarize the basic theories and analyze the literatures. In the second section, we discuss action of customers in the service innovation. In the third section, we analyze the role of employees in the process of service innovation. In the forth section, we integrated employees and customers and designed virtual service innovation function teams. At last, we summarized the discussion of the paper, and discussed some directions for the future.

1 Action of Customers in the Service Innovation

The idea of new service from customers was obtained through periodic meeting between customers and the new service team, observation and occasional interviews [12]. So, a model of new service lifecycle process was designed in Fig.1. It is necessary that designing any product fully matches the customer’s demand and requires thorough understanding of the customers’ business, process, circumstances and environment. In general, Services are characterized either by very close customer contacts or by the

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integration of external factors in the production process. The customer integration is based on simultaneous production and consumption, and is a major characteristic of services. Service functions, such as consultant, sales and after sales services requires a strong interaction with customers. It implies that information about customers’ needs is selected and translated for new services.

However, customers’ attitude is different to the new service in different stages. The types of the new service to customer are comprised of blenching, supplying, customization and cooperating. An matrix is designed that \( X \) is loyalty of customer, \( Y \) is profit from service, \( Z \) is degree of collaborating. The action of customer in the service innovation is analyzed in Tab.1. So, the customer’s participate will supply more chance to the service innovation.

### Tab.1 Analysis of service innovation types involving of customer

<table>
<thead>
<tr>
<th>No.</th>
<th>( X )</th>
<th>( Y )</th>
<th>( Z )</th>
<th>Types involving of customer</th>
<th>Examples of customer’s action in the service innovation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>Blenching</td>
<td>Marketing familiar phase to new service</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>Supplying</td>
<td>Standard service contract from service supplier</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>Customization, cooperating</td>
<td>Service innovation idea when marketing research</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>Cooperating</td>
<td>Co-working, and make a new plan to service</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>Supplying</td>
<td>Keep royalty to supplier for convenience</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>Supplying</td>
<td>Keep cooperating after demand increasing.</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>Cooperating, customization</td>
<td>Service innovation in interior</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>Customization, cooperating</td>
<td>Corporate value and advantage between customer and supplier</td>
</tr>
</tbody>
</table>

2 Role of Employees in the Service Innovation

Employees are the ones who come up with ideas, concepts, and specifications, and turn these into successful innovations. Generally, it is necessary that there are three types of employees below in the NSD process. Of course, the three types of employees take different responsibility in different stages. The Fig.2 was designed in follows:

### 2.1 Front-line Employees

In the ordinary circumstances, front-line employees are merely a part of service delivery system. However, Front-line employees shape the quality of a customer relationship and the quality of the service because of the inseparable nature of service. Front-line employees can produce value during several stages of the NSD process. Because the employees hold the long-term relations and short distance with the customer contact, it makes front-line employees the source of new idea generation. Their knowledge of customer and of competitive offerings can help firm in defining the appropriate level of service customization and user-friendliness. Besides, it is ability of front-line employee to educate and persuade customers about the benefits of a new way of solving a problem. The front-line employees are crucial in embodying the service itself, in differentiating it from similar competitive services and helping customers make decision. Compared to manufacturers, successful service firms should place greater emphasis on the selection, development, and management of employees who work directly with the customer.

### 2.2 Innovation Roles

The outstanding employee is a kind of informal role in organization where new services are impelled to
implement overcoming all kinds of barriers. Besides the outstanding employee, other roles also are important too. In practice, these roles are often combined and performed by one person. Decision makers decide whether the next step is worthwhile or the development process should be terminated during the search stage. Project leader is the employee who co-ordinates innovative efforts and keeps an eye on the time path. Sponsors are the senior manager who should constantly encourage innovation and provide necessary resources. Propeller is talking positively about the NSD projects and persuades other employees to provide support as well.

2.3 Expert

The expert refers to the availability of detailed knowledge about the firm’s basic technologies, customers and delivery systems. Because the expert is a key aspect not only in the new service development stage but also in the new service searches stage. Expertise can make the judgment to the new idea. Therefore, the expert decides the innovation service concept success. Enhancing the expertise is possible through the education and the on-the-job training.

3 Integration of Customers and Employees in the Service Innovation Process

It is well known that today's employee satisfaction, loyalty, and commitment will influence tomorrow's customer satisfaction, loyalty, and commitment. Similarly, the service innovation intent of employees will influence customers' willing in the new service. However, the integration between employees and customers is difficult to new service development. Customers must be organized by employees in the process of service innovation for a successful innovation. For the intent of service innovation, the firm must give some supports to the function team made of employees and customers. So, some polices will be constituted to assist the team. The Fig.3 describes the relation in the innovation process.

3.1 Employee Authority of Service Innovation

Service innovation authority should be designed between manager and employees(7). Once the authority is be endowed to employees, the degree of manager participated in the service innovation project must be taken into account. At the same time, the firm should consider the rational authority arranged and degree of employees participated in the service innovation. It is important that firm would set up some principle for consultation of authority arranged to service innovation.

3.2 Virtual Function Team of Service Innovation

It will increase the successful chance of service innovation that set up some virtual service innovation function teams made of employees and customers. The virtual service innovation function team is made up of employees coming from different sections of firms and different types of customers. This may decrease bulwark and obstacle between customers and service firms for the same intent by rational operation. It can also do something to detailed analysis of demand and operation for new service product. The service firm should arrange innovation authority to different service innovation function teams according to the degree they possess information of innovation. It is necessary for firms to make policies to support the activity of service innovation because the organization structure of virtual service innovation team is loose.

3.3 Incentive of Employees and Customers Participating in the Process of Service Innovation

Generally, the salary system of service firm just maintains the normal operation of service product. However, it is short of special clause for additional payout of employee in the process of service innovation in the service firms. In fact, the innovation constantly happens for service firm. It is positive to perfect the service product by encouraging employee participating in the service innovation. In the same way, it needs incentive when customers participate in the process of service innovation. For employees, the firms may adopt the incentive types of authority distribution, encouragement plan of service innovation and so on.
For customers, it might adopt the incentive types of honorary customer, price discount of service product and so on.

3.4 Rational Policies for Service Innovation

The first question whether there is easy learning process between different virtual service innovation function teams can be answered affirmative. The second question is whether other firms easily copy the innovation. Service firms are quite dependent on key employees in the business [7]. But such tacit skills cannot be easily transferred to other employees in the service firm. The second question is much harder to assess. On the one hand, the service innovation are often internal to the firm and difficult to observe by outside. On the other hand, the service innovation needs cooperation between other firms. It will decrease firms’ cost of service innovation. Thirdly, innovation can be supported by various sorts of service innovation policies. In a word, rational policies for service innovation should consider more factors not only on service firms but also on service industry.

4 An IT Service Innovation Case

W is an IT service firm that offers the modern service of handling official business mainly. The main business lines are the sale of the hardware equipment in the past of firm. With the aggravation of the competition, the profit drops suddenly. For the market competition, this company makes the transition as IT service provider gradually since 2004, the main customer of the company turns into large-scale enterprises in the area gradually. At present, this company has introduced the characteristic IT services such as ‘the one-stop service’ and ‘integrated solution’. With the updating of IT technology, the service of the company can offer is changing constantly too. It has gained most market share of IT official business in the area. What are the factors that make this company change from a hardware equipment seller into an outstanding IT service provider on earth? The conclusion is that IT service innovation enables this company to offer unique IT service for customer and it can offer most suitable services to customer at the most right price. It is the most important factor of service innovation that the firm advance effective participation of employee and customer. At the same time, the firm does a lot of works in the process of new service putting forward, implementation, management and feedback.

4.1 Customer’s Suggestion Card

The firm designs a customer's suggestion card specially. The suggestion cards are different according to different service items. Though it loaded the employees more works, the special suggestion card accumulates a large number of improved services for this firm. After customer's suggestion is adopted, this firm will also send some gifts to the customer, showing attention to the suggestion.

4.2 Virtual Service Innovation Team

Because employees have different service skills, the firm offer customized service by the team made of employees. The specific meetings between employees and the key customers who propose the improvement of service are periodically held. An honorary customer's certificate is awarded to the customer who often providing the suggestions of service improved, and enough benefit is promised to the customer in the purchase of IT services for the future.

4.3 Authority Distribution of Service Innovation

Employees will be rewarded the cash if there are the employee who put forward the suggestion on the improvement of service product and the suggestion is passed in the firm. Meanwhile, employees are responsible for the designing of the new service, the procedure of the new service and the optimization of the new service. The firm will offer essential fund and equipment support. But the important service innovation will be discussed in the special teams of managers, experts and employees.

4.4 Culture Atmosphere of Innovation

In the firm, ideas of the head storm will be written down. Whether it is rational or not, the ideas will not be criticized. The improved service suggestion will influence the salaries of employees and the promotion of position. The regulations of reward stipulate clearly that employee’s good attitude towards study, proposition of the innovative idea will be rewarded in the company. At the same time, if employee has many kinds of technical ability, who will enjoy the technical ability subsidy. In a word, this firm perfects its service product constantly. Service innovation involved by the employee and customer are considered in the system design, encouragement method and various kinds of rules and regulations in the firm. Certainly, the firm gained benefits from service innovation and it became the leader of the IT service in the field of official business in the area.
5 Conclusions

In service firms, innovation process occurs frequently. There are more and more new problems with service industry developing. The paper mentions that it is necessary to study the service innovation based on employees and customers’ involving, virtual service innovation function teams and service innovation policies. New problem are what is the role of employee and customers in the different innovation processes and how to organize the customers and employee including to modes of virtual function teams. It is obvious that the roles of customers and employees will change along with the scale of organization and the type of organization. However, it is regretful that the research is skin-deep on the view of authors. In the further studies, we will give out the mathematic model case and data analysis on the customers’ and employees’ involving in the service innovation.

References


Brief Introduction to Author(s)

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