A Concept of Service Mediator And Its Potential Applications

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Abstract – Service is the hot trend in business and in research in recent years. As a result, many firms and companies shift their business from manufacturing to servitizing. They offer not only products but also the entire services to customers. However, there might be some gaps in shifting operations. A traditional manufacturer would face a lot of challenges when it tries to cater for the needs of every customer. A professional service firm can be a bridge between manufacturers and customers. Therefore, in this paper, we propose a new service mediator model, which is able to keep other partners and end users close to each other and co-create to gain satisfaction.

Keywords: Service field; service mediator; service dominant logic; information service;
1. **Introduction**

Current services represent important and growing contributions to most economies throughout the world. The significance of the service sector calls for research on service science. Companies in the past were usually concerned to manufacture and sell goods to consumers. This traditional mindset called Good-dominant (G-D) logic was based on the traditional perspectives of economic exchange and value creation involving goods (tangible products). The foundation for G-D logic was rooted in economic philosophy and economic science, as it was developed from the work of Smith (1776). The old view was that good logic was founded on economics (Smith 1776, Shaw 1912, Marshall 1927; cited in Vargo and Lusch, 2004). Hence, the goods-centered model became the dominant paradigm for business related disciplines (Vargo and Morgan, 2005). One of the alternative foundations of service science is Service-dominant (S-D) logic (Vargo and Lusch, 2004) shifting its focus from manufacturing goods to providing services. Since the modern world gives a boost to the service sector, G-D logic appears to be lagging behind and now is the time for S-D logic.

As a result of different researches, services also have many definitions and concepts. Concentrating on the marketing of services, Lovelock and Wirtz (2007) state that “services are economic activities offered by one party to another” to “bring desired results” (1) to the customers. In another definition, regarding service as an intangible product, “a service is a time-perishable, intangible experience performed for a customer acting in the role of a co-producer” (Fitzsimmons and Fitzsimmons 2003). From the viewpoint of service dominant logic (SDL), “service is the application of specialized competences (knowledge and skills), through deeds, processes, and performances for the benefit of another entity or the entity itself” (Vargo and Lusch, 2004).
Although there is no agreement on the definition of service, most of researchers affirm the essential of collaborations in interactions between firms and customers. Both firms and customers were beneficiaries of the business. When customers use a service, they also create and define the value of the service. This means value co-creation is agreed by both customers and firms, and thus, the output service is valuable when users are fully satisfied with what is served to them. To get the satisfaction, both sides of the exchange must contribute and cooperate in creating service value. People need social interaction for optimization in terms of some share value criterion. The key value of the service process is therefore the value co-creation.

In the conventional way, some companies have just provided users with information from suppliers as they transfer the information but not the knowledge. Obviously, they do not provide a completed service process for all of their customers (suppliers and users). What a firm brings to customers is just a simple service, and value in exchange. In the transaction of exchanging information and services, it is impossible to exclude the possibility of misunderstanding and difficulties in communication between firms and customers. The exchange lacks satisfaction and cannot respond to the customers’ demands. Therefore, they should have a professional service called mediator to help them consult, control, manage the quality of service exchange. With the help of an expert mediator, the service exchange will go along more smoothly, more comfortably and more satisfyingly.

The new model is based on two factors that are essential for the service exchange. The first one is matching the seeds and needs of service exchanges, and the second is enhancing the value co-creation. Moreover, a concept of service field is considered to optimize the value co-creation. As we know that value is created differently depending on circumstances (e.g.,
human characteristics, place, time, and cost). Kosaka et al. (2011) suggested the concept of a service field in service systems to create a service value that depends on the situation. This concept is derived from the mechanics of an electro-magnetic field, where electro-magnetic power is determined by the relation between the charge of an electron and the electro-magnetic field. When electron matches each other on the magnetic field, the power created will be large and can reach the absolute maximum. Similarly, service value will be optimized and will bring more benefits to both suppliers and customers when the seeds and needs of services are matched.

The proposed service mediator brings a new view of service business and gives ideas for service firms to enhance their operations. This paper also discusses some potential applications of this model to help other organizations utilize their systems so that they will become more and more collaborative to customers.

2. Service Dominant logic and Service field foundations

2.1 Why Service Mediator

In real business, we have many types of business model. Firms could only sell products/services to consumers (B2C) or they do transactions with other companies (B2B). As a matter of fact, B2C involves a service or product exchange from a business to an end user, whereby merchants sell products/services to consumers, while in the second case B2B products and services are sold from one company to another. However, not all businesses are simply work of two sides. In some situations, a firm has to work for both other firms and consumers. In service exchanges, consumers need more information and consultancy to find good quality and satisfactory product/services. On the contrary, firms also need an
intermediary to help them transfer the value to customers and gather customers’ needs. That is why we have Business to Business to Consumer (B2B2C) model. The more complex and advanced model B2B2C is an emerging model that combines Business to Business (B2B) and Business to Consumer (B2C) for a completed product or service transaction. B2B2C is a collaboration process that creates mutually beneficial service and product for all sides in the business.

In fact, B2B2C is a quite good model for e-commerce or Internet providers. They could use Internet applications such as websites, blogs, social network systems (SNS), etc. to promote and enhance the mutual goals of partners and consumers. Nonetheless, in our opinion, B2B2C can expand further to apply not only in business but also in other fields such as government management or human resources management and so on. When consumers and firms engage in exchange process, they need all the information of each other. For example, customers want to know the supplies and services of other firms, too. On the contrary, a company would like to be informed of all the purchaser’s preferences. How to corporate and create the best value is also their expectations. Furthermore, there might be barriers between the sides in the business such as different perspectives, languages, knowledge and so on. Therefore, they need an expert in their field to fulfill the requirement and help the collaboration process to extract optimized value creation. This paper introduces a concept of service mediator in which mediators use their own resources such as knowledge, technology, etc to assist both customers and suppliers in matching their requirements and supplies to reach the optimal satisfaction.
2.2 Service mediator based on Service Dominant Logic (S-D logic)

S-D logic is recently well known in service research. It raises an alternative mindset presenting new perspectives on services and their impact on organizations, markets, and society. From the viewpoint of S-D logic, every social activity is fundamentally concerned with service exchanges (Vargo and Lusch, 2004). Therefore, service is the core of the economic activities, and customers and companies exchange services as well. All companies are service companies, all markets focus on the exchange of services, and all economies and societies are service based (Vargo and Akaka, 2009).

S-D logic emphasizes the important of service mindset, and it suggests both business and research concentrate on value in use and value co-creation of the commercial transaction. In the world of services, we have to switch our minds into customer-oriented and make things more valued, more beneficial to customers. The term “customers” here indicates both firms and consumers (users). When services exchange for services, firm and consumers are equal in transaction process and they all need to collaborate with each other to receive what they want. Our service mediator does research to formulate a concept, which can fulfill the needs of “customers”.

What “customers” want in the transactions? In fact, it depends on what kind of customers. Business firms may want profit, market share, substantial revenues, etc. while consumers want quality, reasonable price, satisfaction, etc of services. Everyone wants a perfect way to exchange value but it may not yet have a good offer. It is proposed that a service mediator control and balance the transactions between companies and consumers. Besides helping them to collaborate with each other, a good service mediator must know how to enhance the quality of services by using it own resources.
In S-D logic, value-in-use is emphasized as opposed to the mindset value-added by manufacturers. Services are not offered solely by manufactures as before. Consumers now have their powers and influences on service creation and they demand to join the creating process. Collaboration between companies and consumers is needed to extract the value in use of the services. S-D logic is captured in ten foundation premises (FPs) and based on that, we have proposed the service mediator concept in Table 1.

Table 1: Service mediator concept based on S-D logic

Adapted from Vargo and Lusch (2008)

<table>
<thead>
<tr>
<th>FP1</th>
<th>Service Dominant logic</th>
<th>Service Mediator concept</th>
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<td></td>
<td>Service is the fundamental basis of exchange.</td>
<td>Firms and users exchange service under management of service mediator.</td>
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| FP2 | Indirect exchange masks the fundamental basis of exchange. | Mediator exchanges management process while firms and users exchange their supplies and demands. |

| FP3 | Goods are a distribution mechanism for service provision. | Mediator usually exchanges intangible products than tangible goods. |

| FP4 | Operant resources are the fundamental sources of competitive advantage. | Mediator use operant resources especially to serve its customers. |

| FP5 | All economies are service economies. | Mediator can apply in various fields such as retail, internet service, human resources, governance, etc. |
| FP6 | The customer is always a co-creator of value. | At the present users’ ideas are significant, The mediator must support them to exchange preferences with business companies. |
| FP7 | The enterprise cannot deliver value but only offer value propositions. | Some companies get into trouble when offering value propositions, thus mediator helps them to transfer their offers to users and feedback the value determined by users. |
| FP8 | A service-centered view is inherently customer oriented and relational. | Mediator uses it own resources and efforts to help firms and users interacts with each other to define the specific need and then develop a solution to meet the needs. |
| FP9 | All social and economic actors are resource integrators. | Mediator helps to create network between firms and users for them to integrate their resources. |
| FP10 | Value is always uniquely and phenomenologically determined by the beneficiary. | In fact, mediator supports both sides (firms and users), users determine service value and works accordingly with firms to co-create and make the |
From the S-D mindset foundation, collaboration and co-creation of firms and users are highly appreciated therefore to optimize the service value, understanding each other is the key factor. A mediator exists to cement the relationships between firms and users. It must be well equipped to leverage the interactions between firms and users. Value co-creation is built through understanding of firms and users. What mediators do is supporting the exchange process and managing it for complete satisfaction.

2.3 Concept of service field for new mediator model

As discussed above, the new service mediator model will be based on the perspective of S-D logic to improve service values through co-creation. In order to do that, the mediator firm needs a mechanism to help suppliers and users co-create in exchanging services. A good mechanism could encourage the collaboration so it could boost value co-creation. In many cases, firms and users do not know how to interact and exchange their supplies and demands. A good mediator will create an environment for them to understand each other for better cooperation.

In this paper, we introduce the service field concept so as to bring mediators a new perspective in serving customers. The concept of the service field has three parts to foster understanding of this new conceptual framework. First, we examine the organization of service field. It contains seeds, needs, and environment. The service field is a cooperative environment containing all contexts of services, and it is a mechanism to increase value co-creation and collaboration. When all contexts of services are gathered in the service field, the
mediator firm finds it easy to identify the seeds and needs of suppliers and purchasers. However, identifying buyers’ requirements and service offerings does not mean that ISFs can analyze and match them suitably and correctly. Therefore, the new mediator must organize and manage a favorable, comfortable, and dependable environment for their business partners (providers) and customers (users) to exchange supplies and requirements. They must also interact with them so that their service attributes can match the levels of satisfaction of one another. The service field is defined as a place that contains all the contexts of the services to extract high value co-creation between suppliers and users (Kosaka et al., 2011). In addition, to the role of organizers, mediators should be referees controlling and standardizing the service quality to leverage service values. Supplies and requirements of concern should be analyzed to fulfill customers’ needs. An ideal environment with prepared data processing tools will help match seeds and needs, generating superior service values. That can fulfill customers’ requirements and bring them satisfaction.

The second issue of the service field is its potential. The situation (e.g., consumer characteristics, place, time, and cost) should generally be considered in the values of services. Even if an identical service is provided, the service values will differ due to consumers’ characteristics or unique circumstances. The “value in use” concept in SDL (Lusch and Vargo, 2006) greatly depends on the situation.

The concept of using a service field in service systems is proposed to create service values dependent on the situation that is created by users’ needs, services provided, and the environment for the services. From the analogy of electro-magnetic field theory in physics, we proposed the concept of service field. Electro-magnetic power is determined by the relationship between the charge of electrons and the electro-magnetic field. Similarly, there is
no service value even with a good service, if there is no potential for the service in service fields. In other words, the service value is created from the relationship between the service itself and its service field, which demonstrates how the service is needed by the customers. Thus, the service field model can be specified as

\[(\text{Service value}) = (\text{service}) \times (\text{service field}),\]

where \(\times\) denotes the relationship between the service and the service field. The concept of a service field is outlined in Figure 1. A high service value is generated when the services are provided based on high potential values in the service field. High potential means that the requirements for the provided services are high. Otherwise, the provided services cannot obtain a high service value. To maximize the service value, a service field should be identified first and then suitable services that correspond to the customers’ characteristics and/or requirements.

This new proposal to create and improve service values is based on service fields and service systems, and it can be applied to various services where service providers and receivers co-create service values. This consideration means that the service system and the concept of service fields can be used as a model of service value creation.
Thirdly, we discuss how to identify a good service field. As figure 1 outlines the concept of service field, we know that a good service field can help obtain great service value. However, it also depends on the potential of service. We must reconcile the two factors to maximize the value co-creation. Having a good environment for service exchange is not an easy task, so a mediator must be creative and effective in building a good system. The service field is formed by the relationship between customers and target services, and it expresses the intensity of service matching. Customers can then be informed of optimal services or service providers and service providers can be briefed on target customers. Making a convenient, friendly, and reliable setting for service exchange is a mediator’s goal.

The identification of the service field is to clarify what services are required by customers in various environments and situations.
(1) Collecting data related to customers’ needs, services of service providers, and environmental data on services

(2) Analyzing data using various methods or technologies for identifying service field

(3) Conducting some results from analysis of collected data

After the service field is identified, the service mediator should find and provide suitable services or information from service providers to users. This will leverage the service values from the beginning when seeds and needs are matched. Consequently, suppliers and users are eager to cooperate in further exchanges to make services increasingly and mutually satisfying through interaction in the co-creation process. Finally, service exchanges benefit all sides in business with optimal service values as all parties co-create the services that they want through the environment of the service field.

3. Service mediator concept and its characteristics

3.1 Organization of a service mediator

As explained above, service values vary according to various circumstances, people, and time. If mediators want to offer optimal service values to both customers and partners, they must concentrate on these elements and process them to enhance the satisfaction of customers. S-D logic and the service field are called alternative and significant mindsets in the new trend of services. They are promising to create service innovations in the chaotic information of service science. Hence, the value co-creation mediator model is proposed based on these foundations.
First, S-D logic emphasizes the value co-creation process when services are exchanged. Vargo and Lusch (2006) stated that “there is no value until an offering is used”. This means the role of collaboration in service exchanges is very important. Only if firms and customers work closely with one another, discuss and share seeds and needs, will created services be accepted with the highest values. Value co-creation is also considered to be the basis of value creation and only co-creation can break out and improve service values for businesses (Prahalad and Ramaswamy, 2004). Therefore, the value co-creation concept is suitable for the new mediator model.

Mediators have a propitious mechanism to extract the optimal values and bring satisfaction to their partners and users. If the service field is identified and managed well, service values offered by a mediator will create a pleasant working environment for co-creation and innovation. That is why the new mediator model should be the organizers and managers of the service field. They are also the referees who control and standardize the service quality. A mediator can provide the required services to both suppliers and users when improving and meeting the criteria of services.

Figure 2 illustrates the structure of a mediator. The most significant task of a service mediator is creating a good service environment for collaboration. By providing a convenient site for firms and users to cooperate, mediators can enhance the service value. The field here could be an information system, a channel, a meeting or any kind of environments that can combine providers and users. Thus, mediators manage and are qualified for all the context exchange in the service field. Through the collaboration in service field, all the participants can understand others better and are ready to give the best service the other side want.
In the exchange, there are a lot of data indicating supplies and demands. Without mediators, providers and users will encounter many obstacles dealing with a large number of data in exchange. In some cases, providers and users can try to handle the data and cooperate with each other but it will demand a lot of time, money and efforts. A professional mediator can do this job in a shorter time with better results. Together with controlling and supporting the value co-creation, a mediator leverages the service value by adding its value. Mediators can qualify and boost the service value by its quality system and through its management, the final output will be better and satisfy the customers.

As given in Figure 2, a system of mediator should have:

a) Organization and management of the service field

b) Promotion of value co-creation
3.2 Characteristics of service mediator

A service mediator sometimes seems to be similar to a B2B2C model but in fact, it is different, table 2 below shows the differences in the two models’ characteristics.

Table 2. Characteristics of service mediator Vs B2B2C

<table>
<thead>
<tr>
<th>Service mediator</th>
<th>B2B2C</th>
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<tbody>
<tr>
<td>• Be a bridge matching seeds and needs of providers and users by creating a co-creation system.</td>
<td>• Establish links between providers and consumers supplies and demands but act as a network of supply chain</td>
</tr>
<tr>
<td>• Develop the collaborative relationship between providers and users.</td>
<td>• Manage the relationship with providers and consumers separately by different strategies.</td>
</tr>
<tr>
<td>• Co-create value</td>
<td>• Transfer value</td>
</tr>
<tr>
<td>• Optimize service value.</td>
<td>• Optimize profit.</td>
</tr>
</tbody>
</table>

a) A bridge matching seeds and needs

A mediator works as an intermediary between firms and users. When users want to find a service, there are a lot of information and offers for their requirements. However, receiving a mass of data can make them confused as there is a wide range of services open to them. On the other hand, providers also have trouble operating their services when they do not know much about their customers. A good mediator has an effective database to classify and match the supplies to demands perfectly. That will help both firms and users cut cost, time and effort in finding suitable partners.
c) Parallels firms-users relationship maintainance

In B2B2C model, a broker in-between will manage customers’ relationship separately with business partner and consumers. Nonetheless, with the service mediator concept, the customers’ relationship must be handled parallel and closely with both kinds of customers. Because the service exchange needs both firms and users to work together, mediators need to keep in touch with both of them and take care of their expectations and satisfaction. Service mediators have to build a friendly and efficient customers’ service to serve both firms and users. This parallel customers’ service structure must fit the provisions and requirements.

c) Value co-creation

Mediators control and qualify the service value in the service exchange thus they join the co-creation process. When users raise their needs, and providers offer service, all of them will be filtered by the data processing of a mediator. After that, the mediator will manage and modify the seeds and needs so that they will match perfectly and the best value can be extracted. Mediators not only transfer the value from companies to users but also make the value better with their assistance. A mediator must join the value co-creation process and enhance it. This step is very important in the service exchange because not all the firms and users can understand and adapt each other to meet expectations. Then the results will satisfy all the sides in the business.

d) Value Optimization

In G-D logic, the profit is the goal of all the organization. However, in S-D logic, profit is not the final target of the company. In service exchange, the more value in use is created,
the more firms obtain cash flow. When customers are satisfied with the service offered, they are happy to pay more and more. What mediators should do is give support to the co-creation process and enhance the value propositions. Optimizing service value will bring money, payment, and extraordinary cash flow as a feedback on service exchange.

4. Potential applications of service mediator

When proposing the service mediator concept, we also want to refer to the potential applications of this model. In the real business now, many companies have shifted their service from manufacturing to service. They have realized the important of service and customer-orientation. Our new concept can bring more satisfaction to firms and consumers as it creates an optimized value through management of a mediator. Applications of mediator model can be any kind of service sector such as IT, retails, marketing, human resources management, governent, and so on. This paper will shortly introduce the most potential information service firms, human resources and governance.

a) Information service firms

In the era of internet, information service firms are significant service companies in the service economy. IBM, Googles, Hitachi, etc. are now focussing on the informative service. They offer many types of services to both business firms and users. Being a mediator is really suitable for them. In fact, they try to collaborate with other business partners and users to create an eco-system for information services. Information service firms could help supplliers and users build value co-creation and cooperate with them for a better service value. The mediator here organizes a good, comfortable, and dependable environment, for their business
partners (providers) and customers (recipients). Accordingly, they can understand each other and work well together to create a perfect service which can satisfy all the parties in the business. The environment here could be an information system, a social network system, or a website, etc. to strengthen the cooperation.

New mediator concept raises some ideas for information service firms as follows:

- Information service firms should re-consider their in the business and setting a new framework to meet the immediate requirements of customers.

- An information firm should provide an environment in which suppliers and users can work with each other in active, effective and fruitful collaboration.

- Information service firms must have efficient tools to support the corporation between suppliers and users then help them to do business smoothly and effectively.

b) Human resources

When mentioning the human resource management (HRM), people usually think that it is a part of an organization which manages labor force for a company. Actually, HRM is a bridge between employees and employers. HRM must balance the requirements and expectations of both sides and make it come up to their satisfactions. Thus, “mediator” is an adequate concept for HRM. As a mediator, HRM involves in the value co-creation process between companies and employees. By supporting their collaboration, HRM can leverage the value extract between the organization and its staffs. Firms realize employees’s expectations and create a good environment for them to work, and people work harder and efficiently for the mutual goal of the exchange. Harmonization managed by HRM will lead to higher
quality of service a company provides to market. HRM can be called an internal mediator of a company.

Some ideas for a better HRM based on mediator concept:

- HRM should prepare a service field for employers and employees to cooperate. It could be a meeting, feedback system, a questionnaire, etc. to help both sides understand and share their thoughts, expectations.

- HRM should be well equipped with and trained suitably to support the collaboration by good consultancy, good response and adaptation to the human issues.

c) Governance management

Government has good features to be a mediator which could leverage the collaborations between users and providers. The first reason why government should choose mediator model for its system is that the government is the one who can gather the users and suppliers working under its umbrella. Government itself presents a good brand and image customers and companies trust and want to work under its supervision. With the reputation that the government has controlled an area town, etc. for a long time, citizens and companies feel comfortable and free to work with each other under government’s management and they undoubtedly share information and make the exchange information valuable and useful.

Moreover, government has a good database of all citizens and firms within its sphere of control so that government is able to analyze and match potential seeds and needs. Then, government has a powerful weapon, database, to satisfy customers and providers. All the information of citizens and providers will be analyzed, discussed and matched suitably.
Lastly, government can be a good mediator since government is an office with people of good performance. The officers in local governments are ones who are proficient in communicating with citizens and companies. This advantage encourages them to be a good mediator helping users and suppliers to understand each other and work close to each other, together build a better service value through co-creation.

Some recommendations for government if they want to be a good mediator are shown below:

- Government should focus on developing the IT system to support service process. In reality, IT technology is not the advantage of government compared to specific IT solution companies, however, with good human resources, government can transform and become modern, high-tech to adapt to specific situations.

  - Government should create a friendly and reliable service environment for companies and citizens to interact with each other such as official websites with rich and useful data, exhibitions for exchanging supplies and demands, etc.

  - Government should research and pass laws supporting collaborations between firms and people and hence help them lead a satisfied life.

5. Conclusions

In the new era of customer-centric and the trend of service mindset, an organization must reconsider their business systems and try to find a good model to discover customers’ requirements and satisfy them. Our research is aimed at answering the question “What new ideas are there for improving businesses?” to make customers satisfied and happy with services they have been provided with.
Because the significance of value co-creation and value in use in bringing satisfaction, service mediator concept is proposed from the perspective of S-D logic and service field theory. Value co-creation based on S-D logic is the core process to enhance the productivity of services thus making customers satisfied with companies. The service field in the new model is cyberspace in which service values are co-created and used as a mechanism to determine how satisfied customers are via the co-created values.

To illustrate the model, this paper has introduced three potential applications of the new model. Each example in different business field shows the wide capable application of the mediator model. Ideas for providing better value co-creation in the business of the service mediator are also put forward for a better service proposition.

Overall, new service mediator model should be considered as a good model to provide high values in exchanges with customers. This strategy would help firms gain customers’ satisfaction and be more competitive in the market. By developing a new service model based on S-D logic, we hope that it will help promote value co-creation, and enhance collaboration between mediators, suppliers, and users. Mediators will contribute to the value creation process and help all parties collaborate optimally in providing superior values by acting as a useful bridge between business partners and users.
References


