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REVIEW ON DART MODEL USED IN VALUE CO-CREATION FOR EVALUATION OF E-SERVICE SYSTEM

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Abstract-

The locus for value creation is the interactions between the firm and the customers. Such interactions can happen through four main building blocks of co-creation; dialogue, access, risk, and transparency which is called DART model. Value co-creation is a concept that been used in marketing for evaluation. Services evaluate by value co-creation concept through use. But this study attempts to review on DART model which used in value co-creation for evaluation of e-service system. The method which used in this study is assessing the documents related to this area and the technique which applied in this way is content analysis. Results show that value co-creation concept still capable to extend this model and or use it in different way based on the e-service system.

Keywords- *value co-creation- co-creation of value- e-service system- DART model*

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1. Introduction

Being partners in business imply that value is co-created by the customer and the organization. Leaders need a new frame of reference for value creation that is different from the traditional system of organizational-centric value creation. Prahalad and Ramaswamy (2004) said that "value creation centers on co-creation of unique value with customers". This begins by recognizing that the role of consumer which has changed from isolated to connected, from unaware to inform and from passive to active. The impact of the connected, informed and active consumer is manifested in the DART model of value co-creation. As the consumer-organization interaction becomes the locus of value creation, the process of co-creation can be implemented through the four key building blocks of the DART model: dialogue, access, risk assessment and transparency. It is an important notion that these are interrelated, and should not be seen as separate blocks, and by embracing these companies enhances the opportunities for value co-creation.

2. Research Objectives

Based on the research background, the work conducted aims to review on DART model which used in value co-creation for evaluation of e-service system.

3. Research Methodology

This study has been undertaken content analysis. In this way the goal of review is to assess related documents to DART model which used in value co-creation in e-service system.

4. Results and Discussion

Prahalad and Ramaswamy (2004/a) mentioned that the firm and its suppliers can learn more about *consumers* and get new ideas for design, engineering and manufacturing. Also Restuccia and Ouellet (2009) aimed to increase the customer involvement. In this case they mentioned that a *consumer* knows how to choose a *quality* to improve production every day. Davison (2004) recommended to measure *customer satisfaction* in order to change service level, change pricing

model, or manage the relationship between pricing and service level. In the simple word customer involvement and measure their satisfaction helps to improve service quality. But how to involve customer and how to measure their satisfaction? In order to do these the concept of value co-creation becomes highlighted.

Prahalad and Ramaswamy (2004/b) asked "How do we build a system for co-creation of value? In this way Prahalad and Ramaswamy (2004/a) mentioned that the locus for value creation is the interactions between the firm and the customers. Such interactions can happen through four main building blocks of co-creation and introduced these blocks as DART model which is acronym of **D**ialogue, **A**ccess, **R**isk, and **T**ransparency (DART). Also Restuccia and Ouellet (2009) introduced DART as *component* of interaction. Prahalad and Ramaswamy (2004/c) in another article introduced DART as initial building blocks of co-creation and mentioned that DART forms the foundation for co-creation of value, but these *factors* alone may not produce compelling experiences in co-creation. Prahalad and Ramaswamy (2004) introduced these blocks as follow:

4.1 Dialog

Dialogue is the most important element for co-creating process, since market consider as a locus of conversation between customers and firms. They also mentioned that Dialogue means interactivity, deep engagement, and a propensity to act (on sides, means provider and consumer). It is about creating a conversation where the participating parties are equal, and thus also implies shared learning and communication. It entails empathic understanding built around experiencing what consumers experience, and this mutual dialogue has to take place around issues that interests both the consumer and the firm. It also requires a forum where the dialogue can occur, and also rules of engagement are necessary to create an orderly and productive interaction. They mentioned that "But dialog is often very difficult when the consumers do not have the same access and transparency to information as the firm. Without the infrastructure for dialogue, there is little value for both sides".

4.2 Access

The authors mentioned "It refers to the level of access to data provided to one or more of the value co-creating sides and it begins with tools and information". Customers have access to instrument and knowledgeable person can create their own experience outcome; it doesn't need customers' ownership of products for experiencing value, it can be provide by access to experiences of interactions which emphasized by them. The authors also mentioned that, "More knowledgeable decisions can be made with access to greater amount of information".

4.3 Risk and Benefit

Prahalad and Ramaswamy (2004) mentioned that "Another building block of the co-creation process is risk assessment. Risk is by understood as the probability of harm to the consumer. Through dialogue customers are able to ask questions to firms, which in turn can help creating a more trusting relationship. An in dept understanding of risks and advantages with co-creation needs to be acknowledged by customers and firm, and this understanding has to be commonly accepted by the two actors. Customers need to get information about the advantages and disadvantages of the system that is value in use. However according to Prahalad and Ramaswamy (2004), customers play a more active role and are no longer satisfied with solely getting information of products' pros and cons. According to them, "To take a well informed course of action, it has to be a clear evaluation by the co-creating party of all the Risk-benefits. Access, Dialog, and Transparency can lead to this evaluation". Also they mentioned that "it is becoming much more common for customers to persist that they are fully informed of the risks". If customers co-create value and being informed about risk of products and services, they will be responsible about risks probably happen which Prahalad and Ramaswamy (2005) mentioned that.

4.4 Transparency

The former information asymmetry between customers and companies is disappearing and transparency is increasingly desirable, and necessary to create trust between institutions and individuals which represented by Prahalad and Ramaswamy (2004). In other word customers and companies can have a sufficient effect on co-creating processes if information is transparent

to them. Additionally transparency cause trust between customers and companies which represented by Prahalad and Ramaswamy (2005). As Prahalad and Ramaswamy (2004) said, "This is related to the level of clarity in objectives and actions between one or more value creators, and it is very closely related to accessibility as well as facilitates collaborative dialogue with consumers". Also they mentioned that, "Transparency has allowed customers to interact with firm in potentially intrusive ways; it allows customers to measure the real-time costs of their trading". On the other hands they mentioned "It is not surprising therefore that such transparency of trading is now attracting many individual investors". According to Brounen et al. in 2001 and also Evans and Wurster in 1999, "Information transparency is the degree of visibility and accessibility of the service information of e-service marketers to their customers".

As mentioned earlier Prahalad and Ramaswamy (2004) introduced Dialog as the most important block but also mentioned that dialog will be difficult if access and transparency of customers to the information was not enough. So in this way the authors combine these blocks two by two and discuss about them. In summary they said it is important to mentioned these building blocks are linked together in the sense that one can facilitate another, for example transparency can facilitate a collaborative dialogue. Through such combinations, new and important capabilities arise in companies. Access and transparency for instance enhances the consumer's ability to make informed choices. Dialogue and risk assessment enhances the ability to debate and co-develop public and private policy choices. Access and dialogue enhances the ability to develop and maintain thematic communities. Transparency and risk assessment enhances the ability to co-develop trust. The authors mentioned that more importantly, dialog, access, and transparency can lead to a clear assessment by the consumer of the risk-benefits of a course of action and decision. This shows that evaluation of e-service system by consumers through DART model, help to avoid the available risk and improve the benefits. Finally the authors conclude that managers can combine these blocks in different ways. As the authors said these combinations enables companies to better engage customers as collaborators.

In this case Ahrar and AbdulRahman (2012) mentioned that evaluation of e-service system is important in order to gain success and introduced a list of attributes based on DART model to evaluate e-service systems. Also the authors mentioned in another article that the best way to

evaluate with co-creation of value is using DART model. As Prahalad and Ramaswamy (2004) said it is because of the progress towards DART cannot be stopped.

Adeleke and AbdulRahman (2012) used DART building block of value co-creation (Dialogue, Access, Risk management and Transparency) to identify the major practices of value co-creation of the government with citizen. Payne *et al.* (2008) mentioned that in value co-creation concept just DART model was introducing and tried to come up with the new frame work in this concept that capable to cover different perspective like satisfying expectation by customer. Then Mukhtar et al. (2012) come up with value co-creation model to satisfy customers. The authors investigated the role of different models like DART model and Payne's model in the process of creating products and/or services and to customer value. While Adeleke and AbdulRahman (2011) extended the DART model and then in another article come up with a frame work that arises from comparison between DART model and soft system methodology.

5. Conclusion

The locus for value creation is the interactions between the firm and the customers. Such interactions can happen through four main building blocks which called them DART model the acronym of Dialogue, Access, Risk, and Transparency (DART). Value co-creation is a concept that use in marketing for evaluation. Services evaluate by value co-creation concept through use. In conclusion this study reviewed on DART model which used in value co-creation for evaluation of e-service system. Results show that evaluation of e-service system by consumers through DART model, help to avoid the available risk and improve the benefits. Also value co-creation concept still capable to extend this model and or use it in different way based on the e-service system like many authors which worked on it. But DART model still understood as the main initial model for co-creation of value.

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