Co-Creation Performance Analysis: A Survey of XL SIM Card Users on XL Interactive Fan Page

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Abstract

Purpose - To conduct a survey study on Co-Creation performance analysis on XL SIM card users on XL interactive fan page. Co-creation, as a marketing strategy, aims at building character and improving product performance through collaboration with customers. This strategy is expected to increase sales and potential markets. Telecommunication is one of the industrial sectors with greatly potential market.

Design/Methodology/Approach - The research method used was cross-sectional method. This study was carried out with the margin of error 0.05, the degrees of freedom of dk (n-2), and one-sided test; one-tailed test. Hypothesis testing was used to determine whether the hypothesis was accepted or rejected.

Findings - Co-creation performance on XL product comprised of Interaction Across, Option, Access, and Price experience. The assessment of access had highest dimension in creating customer value and had impact on customer satisfaction. On the contrary, option dimension was the lowest one.

Research Limitations/Implications - Co-creation had come to be value-added product as the result of collaboration between producer and customers. However, the customers considered the performance of co-creation; option dimension, did not work effectively.

Practical Implications - The results indicated that value dimension had highest average on the co-creation performance of XL sim card users. Contrarily, the smallest value obtained was option dimension. This implied that XL had provided enough access between customers and the company. Accordingly, the company knows exactly customers' needs and expectation. The customers can also choose what they need and expect from the product used.

Keywords - Co-Creation

Paper Type - Research Paper
Introduction

Co-creation has been one element of new wave marketing, (Hermawan Kertajaya 2009). Co-creation, as a marketing strategy, aims at building character and improving product performance through collaboration with customers. This strategy is expected to increase sales and potential markets. Due to positive response from telecommunications service users who felt satisfied with the ease and benefits the customers received, telecommunication has become one of the industrial sectors with greatly potential market. This phenomenon can be seen from the growth in the number of cellular users in Indonesia over the past five years (Swa Magazine XXXI / 8-12 January 2015).

<table>
<thead>
<tr>
<th>Year</th>
<th>Total (in million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>318.150</td>
</tr>
<tr>
<td>2015</td>
<td>328.775</td>
</tr>
<tr>
<td>2016</td>
<td>339.400</td>
</tr>
<tr>
<td>2017</td>
<td>381.700</td>
</tr>
<tr>
<td>2018</td>
<td>391.400</td>
</tr>
</tbody>
</table>

Table 1. Cellular Users in Indonesia

Telecommunication industry requires support from mobile operators. Five mobile operator companies in Indonesia are Telkomsel, XL Axiata, Indosat Ooredoo, Smart and Tri (Informatika 2019a). The current competitive market share can be seen in the fluctuative market share of the telecommunications industry, for example XL Axiata experienced highest market share decline (Informatika 2019b).

<table>
<thead>
<tr>
<th>Year</th>
<th>Telkomsel (Simpati)</th>
<th>Telkomsel (AS)</th>
<th>XL Axiata (XL)</th>
<th>Indosat Ooredoo (IM 3)</th>
<th>Axis</th>
<th>Tri (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>35,9%</td>
<td>11,6%</td>
<td>19,0%</td>
<td>18,5%</td>
<td>5,6%</td>
<td>5,6%</td>
</tr>
<tr>
<td>2016</td>
<td>33,4%</td>
<td>11,9%</td>
<td>19,2%</td>
<td>20,7%</td>
<td>8,0%</td>
<td>8,0%</td>
</tr>
<tr>
<td>2017</td>
<td>28,0%</td>
<td>14,1%</td>
<td>16,0%</td>
<td>18,0%</td>
<td>8,6%</td>
<td>8,6%</td>
</tr>
<tr>
<td>2018</td>
<td>32,9%</td>
<td>9,7%</td>
<td>14,1%</td>
<td>14,0%</td>
<td>7,5%</td>
<td>10,1%</td>
</tr>
</tbody>
</table>

Table 2. Market Share

Table 2 provides an overview of the market share in mobile telecommunications industry. As seen on the table, market share of XL has experienced fluctuation. This decline is a serious problem to XL company due to the impact on the number of its customers. The contributing factors to the decline relates to the decrease of customer satisfaction. Customer satisfaction, policies changes on mobile operator can indicate whether a customer may switch to another brand or not, especially if the brand is not in accordance with the wishes and needs of the customer.

XL has done innovative effort to provide satisfaction for customers. They have tried to meet two current telecommunications needs namely the internet and communicating with others. Co-creation on XL products has made it possible to provide choices for consumers. The products offered by XL were built together through collaboration with customers which seem very innovative and good. Co-creation between customers and producers are very profitable in these competitive situations. As customer needs develop dynamically, value creation cannot simply use conventional tools or media. To implement Co-creation, XL creates a page my.xl.co.id. This site is intended to allow the customer to create and to decide the package services they want. The site is useful for XL because they do not need to create a service that the customers do not want. XL has done realistic co-creation strategies as communication channel in order that they can collaborate with the customers more easily and closely. Because the internet user in Indonesia has...
significantly increased, XL has launched excellent service with reasonable price and the customers can access whenever they want (Informatika 2019b). Therefore, the researcher is interested in doing a research on co-creation performance analysis: a survey study on XL SIM card users in XL interactive fan page.

Literature Review

Co-Creation

Co-Creation is the process of developing new products that result in creating new things. New product development is a stage of the process that is full of challenges and high risks (Hermawan Kertajaya 2009). This development process involves various cross divisions or departments, not only the marketing department but also other operational parts. The stages of product development are as follows: The first is idea discovery. This stage usually starts from market studies related to market trends, then identifies consumer behavior and explores consumer needs and wants. The ideas obtained through the process before produces relevant ideas about the product that will be developed. Through the development of Co-creation products, creativity in the manufacture of products is handed to the co-creator. It aims to create a company centric approach based on multiple sources.

In new wave marketing era, producers together with consumers can create and develop dynamic and interactive co-creation products based on multiple sources. The process related to value creation not only coordinate in terms of quality, cost and delivery but also must be conducted collaboratively (Hermawan Kertajaya 2009). The success of new products is not only influenced by product quality, but also market conditions, target customer selection, even product launch times and market conditions. In the process of product development, the company tries to create together with experts who are able to identify and create quality products. Prahalad and Ramaswammy as in (Hermawan Kertajaya 2009) argued that if the company had implemented the co-creation process well, then the value of the product would be better than the product produced.

Co-creation is a creative activity and social process through collaboration between producers and users to create value for customers (Gustafsson, Kristensson, and Witell 2012). Co-creation is engaging customers as active participants in the consumption experience, with the various points of interaction being the locus of co-creation of value (Prahalad and Venkat Ramaswammy, 2004). Co-creation is becoming increasingly popular among companies, and intensive communication with customers is generally seen as determining the success of a new service or product (Gustafsson, Kristensson, & Witell, 2012). In the Co-creation process, the company works with all stakeholders, especially customers. Customers (users, e-customers, global customers, community customers, and even non-customers) know what they want and how products or services can be changed to provide new values. The core principle of co-creation is "attracting people to create valuable experiences together" while enhancing the network economy (Ramaswamy and Gouillart 2010).

Nowadays consumers have major influences in business system. Supporting systems with new tools allow consumers to interact with companies to create value for example if they are not satisfied with the choice of services or products available. The changing nature of consumer-company interaction focuses on value creation, by changing the meaning of value and the value creation process. Co-creation is the participation of consumers together with producers in value creation in the market. These typical activities exceed the idea of co-creation as apprehended in services that are jointly actualized by suppliers and customers, they also carry out customizations aimed at fulfilling the effective cost of needs and desires (Zwass Vladimir 2010). Therefore, co-creation can be defined as dynamic and interactive form of cooperation and it derives from multiple sources through creative activities and social process and through collaboration between producer and customer in creating customer value. The product development process continually creates new things and new product development is the result of challenge and risk process.

According to Prahalad & Ramaswammy, the most fundamental thing that the company must take action is to change infrastructure in creating value. They further describe four important building blocks in co-creation process between companies and customers called "new set of building blocks" abbreviated as DART:

1. Dialogue: it facilitates information and knowledge exchange between producer and consumer.
2. Access: it provides simplicity in collaborating activities and accessing information and technology.

3. Risk Assessment: it means that producers in creating product should be able to do plans to estimate the success of the products.

4. Transparency: it allows the customers to know the material on the product and to be able to customize the product.

DART is a model of basic principles and must be owned by companies to successfully implement co-creation. However the DART model is not enough to create an experience that satisfies the customer. Companies must also focus on the dimensions of their interactions choices with customers who must manage their co-creation experience well (Prahalad and Venkat Ramaswamy, 2004). Co-creation in society is very important as in social groups and expert team which gather, create and share information, knowledge, and market exchanges. The application of co-creation in the industrial world through new media has begun to develop, but has not yet reached a level of development and has not been applied as a whole. According to (Zach Gillen et.al 2007), there are four new paradigms in creating customer experiences through co-creation based on:

1. Across Interaction

Despite the belief on influence of technological advancement towards industrial revolution channel, many people do not realize that good channel option either chosen by companies or customers can eventually form co-creation experience in creating fundamental thing together (Prahalad and Venkat Ramaswamy. 2004). As the channel varies, the quality of co-creation experience through different channel should be made consistent in creating value. The consumers should use across interaction based on their choices as their functions as consumer’s competence, background, interest, and needs. The roles of company are to arrange the across interaction by convincing and creating consistent quality. The consumers would like to have freedom in choosing the ways they interact with the companies (Prahalad and Venkat Ramaswamy. 2004). Therefore, the company should always focus on co-creation experience through varied channel.

2. Product Option

Consumers want to make choices that reflect their view of value. Companies must be able to provide centric option experience that reflects consumer’s wants and needs. As a consumer, I want choices that allow me to design my own personal experience effectively, according to what I want (Prahalad and Venkat Ramaswamy. 2004). As a consumer, I want the company to accommodate my circumstances, needs, choices or preferences, experience, and desires. I want to include my view of value on the menu in the selection, rather than accepting the menu that has been provided by the company. This should be a concern for suppliers so that the perceived customer value (customer delivered value) becomes optimal and consumers will feel satisfied with the performance of the company concerned.

3. Access

Access between companies and consumers is the traditional basis of the value extraction process. Access includes logistics, information, channels and costs, as well as business among the two parties. Consumers want to interact with the styles and materials they want (Prahalad and Venkat Ramaswamy. 2004). Key variable of transaction experience is consumer’s heterogeneity. As an example, consumers had different attitudes towards the impact of using information and technology towards their privacy. This heterogeneity is often ignored by company managers because they only focus mainly on cost efficiency. This shows gaps between company’s thought and customer’s idea. For companies, access efficiency can result in reduced costs that lead to value imaging, while for consumers ease and openness creates satisfaction that results in customer loyalty to the experience they have.

4. Price Experience

In business, product performance and prices are solely viewed using a company perspective. Business people usually negotiate prices with costs, creating prices based on the company’s financing structure. Prahalad and Ramaswamy in (Hermawan Kertajaya 2009) argued “if the company has successfully implemented the co-creation process well, its products will be better than products produced through new product development”.

Co-creation in society is very important as in social groups and expert team who gather, create and share information, knowledge, and market exchanges. The application of co-creation in the industrial world through new media has begun to develop, but has not
yet reached a level of development and has not been applied as a whole. Fronteer strategies describe four types of co-creation configuration especially in business with open sources.

**Methodology/Materials**

1. **Hypothesis Development**

This study was carried out with significance level of 0.05, the degree of freedom of dk (n-2), and one-sided test; right-tailed test. Statistically, hypothesis tested to decide whether the hypothesis was accepted or rejected is described as follows:

\[ H_0: \rho = 0, \] means there is no significant influence among interaction across, option, access, price experience towards co-creation performance.

2. **Method**

The research method used was cross-sectional method. It is research methods by studying objects in a certain period of time which are not sustainable in the long term (Umar 2008). Collecting information from research subjects is only taken once in a period of time, so this research is one-shot or cross-sectional (M alhotra Naresh K 2010).

2.1 Sample and Data Collection

Based on sample selection using the Slovin technique formula, a sample of 98.28 was determined. Sample is better to add a little more than the amount of mathematics (Suharsimi Arikunto 2009). To obtain representative sample, the sample is set to 100. The questionnaire was used to complete the data. The questionnaire contained questions and statements regarding the characteristics of the respondents, the respondents' experiences on XL Sim Card. The steps undertaken in compiling questionnaire consisted of formulating questions and alternative answers for question items. The type of questionnaire used was close-ended questions. It consisted of a set of questions and alternative answers, so that respondents only choose alternative answers available, and determine the scoring for each item of questions.

2.2 Measurements

Descriptive analysis was employed to describe respondents' answers concerning co-creation which covered interaction across, option, access, price experience. To decide whether hypothesis was accepted or rejected, hypothesis was statistically tested to meet criteria if \( F_{value} > F_{table} \) (Sugiyono 2008).

**Result**

\[ H_0: \rho = 0, \] meant there was no significant influence on interaction across, option, access, price experience towards performance of co-creation.

| Coefficienta | | |
|---------------|----------------|----------------|----------------|
| Model | Unstandardized Coefficients | Standardized Coefficients | t | Sig. |
| 1 (Constant) | .344 | .699 | 9.663 | .000 |
| X | .2127 | 1.542 | 1.380 | .171 |

**Model Summaryb**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.699</td>
<td>.488</td>
<td>.483</td>
<td>2.66232</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Y
b. Predictors: (Constant), X

**Table 3. Simultaneous Hypothesis Test**

<table>
<thead>
<tr>
<th>Alternative Hypothesis</th>
<th>F value</th>
<th>F table</th>
<th>Result</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>X on Y</td>
<td>93,374</td>
<td>3,938</td>
<td>( H_0 ) rejected</td>
<td>Significance</td>
</tr>
</tbody>
</table>
Based on Table 3, F test taken from A nova, it was obtained F value of 93.374. A nova table showed that F value > F table, 93.374 > 3.938 with a probability value (Sig) = 0.000, because the Sig value ≤ 0.05, then the decision was H0 was rejected and Ha was accepted. This indicated that simultaneous (overall) interaction across, options, access, price experience built the Co-Creation construct.

Findings
Due to the higher opportunities in the telecommunications industry business, XL had taken more steps to provide satisfaction to its customers. Given the fact that the market share to get new customer was fairly competitive, XL through co-creation can create conception and innovation between consumer and company to obtain more customer value. This can make XL product become more superior and provide satisfaction that the consumer desires. Co-creation strategy can build character and increase product performance creatively. This can be reached through good collaboration between the experts and customers. It is hoped that this strategy can drive sales and increase potential market. Co-creation is an active, creative and social process, based on collaboration between producers and users, that is initiated by the firm to generate value for customers (Gustafsson, Kristensson, and Witell 2012).

In new wave marketing era, producers together with consumers can create and develop dynamic and interactive co-creation products based on multiple sources. The process related to value creation not only coordinate in terms of quality, cost and delivery but also must be conducted collaboratively (Hermawan Kertajaya 2009). XL has done innovative effort to provide satisfaction for customers. They have tried to meet two current telecommunications needs namely the internet and communicating with others. Co-creation on XL products has made it possible to provide choices for consumers. The products offered by XL were built together through collaboration with customers which seem very innovative and good. Co-creation between customers and producers are very profitable in these competitive situations. As customer needs develop dynamically, value creation cannot simply use conventional tools or media. To implement Co-creation, XL creates a page my.xl.co.id. This site is intended to allow the customer to create and to decide the package services they want. The site is useful for XL because they do not need to create a service that the customers do not want. XL has done realistic co-creation strategies as communication channel in order that they can collaborate with the customers more easily and closely. Due to large number of internet users in Indonesia, XL has chosen internet package to offer co-creation in providing satisfaction and different experience for the customers. To create a separate package, customers can access into the service site. Each XL customer needs to register the sim card number used and then activate it. Customers who have registered at my.xl.co.id can then make the appropriate package options.

A variety of offers are presented at the initial appearance such as internet access, voice services, and message as a standard telecommunications needs of today's society. The next step is the customer can customize the service that will be used according to the needs and choices. Then customers can pay the package with a bill on smartphone. Another experience at the final stage of using my.xl.co.id is the user can give the name of the package that he made himself. This experience is characteristic of a collaboration between producers and consumers to produce products. Customers and XL work together as partners in developing products through ideas or input submitted. This gives customers freedom to make choices, expression to support their own telecommunications style.

1. Interaction Across in Co-Creation
Despite the belief on influence of technological advance towards industrial revolution channel, many people do not realize that good channel option either chosen by companies or customers can eventually form co-creation experience in creating fundamental thing together. As the channel varies, the quality of co-creation experience through different channel should be made consistent in creating value. The consumers should use across interaction based on their choices as their functions as consumer's competence, background, interest, and needs. XL Axiata provides services on website my.xl.co.id for the consumers in creating and choosing services products. They also create a fan page to see consumer's need in data access and mobile voice.

The highest assessment of respondents was in terms of suitability of the fan page community selection to find out customers need in using data access & mobile voice with a score of 490. While the lowest assessment was on the quality of the product formulation made by the customer and XL as a service provider with a score of 447. The choice suitability of fan page community to find out the
customer's need in using data access and mobile voice has highest score in Interaction Across dimension which was part of XL co-creation. The respondents considered the suitability in choosing fan page community through social media such as on Facebook to interact with XL Axiata. Facebook, owned by all people, enabled XL to find out what their customer needs. The customer would like to have freedom of choice in interacting with the companies by many ways (Prahalad and Venkat Ramaswamy, 2004). Therefore, the company needs to focus on co-creation experience through varied channel. The quality of product formulation option made by customer and XL as service provider had lowest score. This is due to there were some respondents who felt less satisfied about the quality of product formulation.

2. Option dalam Co-Creation
Consumers want to make choices that reflect their view of value. Companies must be able to provide centric option experience that reflects consumer's wants and needs. The highest respondent score on variation of data access packet and voice was 468. Access data package and voice offered by XL were varied. XL tried to understand the customer's need and expectation. XL provided opportunity to the customer to take part in creating product that suit their needs and the customers did not only receive package option provided by XL. XL expected that by doing so the customers would feel satisfied and loyal because the customers thought that I would express my view concerning on the value on the menu option instead of receiving available menu (Prahalad and Venkat Ramaswamy, 2004). The supplier should certainly pay attention so that the customer delivered value would be optimum and the customers would be satisfied with the efforts of the company.

The lowest score obtained was 461 on the assessment of service suitability offered by XL as service provider in fulfilling customers' needs. The score obtained was because there were some respondents who felt not satisfied with the XL offers. Therefore, XL need to keep on innovating and finding out customers' needs and wants in communication service. If XL could meet customer expectation, they will be more satisfied and loyal to XL.

3. Access dalam Co-Creation
Access between companies and consumers is the traditional basis of the value extraction process. Access includes logistics, information, channels and costs, as well as business between the two parties. Regarding to the ease of accessing the website my.xl.co.id and making packages that suit the needs and desires of customers, the highest score of respondents obtained was 475. This showed that respondents got satisfaction because of its easy access, especially in making package choices that suit customer needs on my.xl.co.id. The website can be accessed directly through mobile phones, tablets and computers, which include various features that can facilitate telecommunications. For companies, access efficiency can result in reduced costs that lead to value imaging, while for consumers ease and openness creates satisfaction that results in customer loyalty for the experience they have experienced (Prahalad and Venkat Ramaswamy, 2004).

The availability of interaction features between XL and customers on my.xl.co.id feature had the lowest score of 451. There were found respondents who resisted the unavailability of interaction between XL and customers. Website my.xl.co.id only provided product service features; however, social media such as Facebook and Twitter were the direct interactions between customers and XL. Therefore, customers felt if the website did not provide enough customer service.

4. Price Experience in Co-Creation
In business product performance and prices are often viewed using a company perspective. Business people usually negotiate prices with costs, creating prices based on the company's financing structure. Regarding on suitability between the service package created by the customer on my.xl.co.id menu and customer purchasing power, the highest score obtained was 522. To increase customer satisfaction XL provides an opportunity for customers to create their own needed service package. The price for the service package provided by XL is adjusted to the customer's purchasing power, there are 2 types of XL internet tariffs, namely: 1) basic internet tariff, the rate is charged in accordance with the internet data used. 2) Internet package, you subscribe to internet package as needed. Price adjustment with products made by XL is expected to succeed the co-creation. Prahalad and Ramaswamy believes that if the company
has run the Co-creation process well, its products will be better than products produced through new product development (Hermawan Kertajaya 2009).

In terms of suitability of customer expectation on my.xl.co.id feature in accommodating the needs and desires, the lowest score of 460 was obtained. There were respondents who did not feel satisfied with my.xl.co.id services, they did not get the product or services based on their expectation. Products offered if in line with customer expectations will create customer satisfaction.

**Conclusion**

Respondents' assessment of Co-Creation based on item questions showed the highest average value was in the suitability of service package questions created by customers on my.xl.co.id with customer purchasing power with a score of 5.22. XL offers service package products at relatively cheap prices so that it is affordable among the people. In this study most of the correspondents had a job as private employees with an income of between Rp. 2,500,000-5,000,000 so the purchasing power of the XL service package is very high. The lowest indicator value is in the question of the quality of the choice of product formulations made by customers and XL as a service provider of 4.47. The low indicator is caused by the quality of the product formulation chosen by the customer to be updated. The choice of internet packages provided by XL must still be updated. Therefore there are no shortcomings or dissatisfaction felt by customers.

When viewed based on dimensions, the assessment on the access dimension has the largest average dimension value of 15.2175. This shows that XL has given access between customers and the company, so that the company knows what is needed and what is expected by its customers. The customers can choose what they need and expect from the product used. While the smallest value is in the option dimension was 6.985.

**Implications**

Theoretical framework adopted in this study refer to the theory (Hermawan Kertajaya 2009). In new wave marketing, producers can create together with consumers in developing co-creation products that are dynamic, interactive and based on multiple sources. There is a process related to value creation done which is no longer just coordinating everything related to quality, cost and delivery but must be done collaboratively (Hermawan Kertajaya 2009). Based on the above definitions, co-creation can be defined as a form of cooperation that is more dynamic, interactive, and comes from multiple sources through creative activities and social processes through collaboration between producers and users to create value for customers. The dimensions used in this study are Interaction Across, Option, Access and Price experience. Based on these findings, it is believed the results of this study are able to contribute in theoretical aspects (scientific), namely for the development of marketing management science, through approaches and methods used primarily in an effort to explore new approaches in aspects of marketing strategy concerning Co-Creation so it is hoped that this research can contribute to academics in developing marketing theory.

**References**


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