The Power of Customer Value on Customer Satisfaction at Non-Formal Education Industry

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Abstract

The need for skilled-human resource in Indonesia is increasing sharply. Non-formal education in Indonesia such as courses and training has a very strong role because non-formal education functions to develop the potential of students with an emphasis on mastering functional knowledge and skills and developing professional attitudes and personality. Non-formal education is education pathway outside formal education that can be implemented in a structured and in several levels. The purpose of this study was to determine the effect of customer value on customer satisfaction in non-formal education institutions. This research was conducted at a non-formal education institution in Sidoarjo, Indonesia. The results of this study indicate that customer value which consists of environmental, sensory, interpersonal, procedural, deliverable, informational and financial simultaneously and partially has a significant effect on customer satisfaction.

Keywords
Customer Value, Customer Satisfaction, Non-Formal Education

1. Introduction
What is power? According to Webster dictionary, "power is possesion of control, authority, or influence over others". In this study we translate power as significant or strong influence to others. To know the power of customer value in informal education industry is very important since non-formal education has a very important role to develop human resource. Education is fundamental to improving the quality of human life and ensuring social and economic progress. Education also plays a key role in shaping the ability of a developing country to create, absorb modern technology, and to develop capacity and disseminate knowledge.

According to the Indonesia National Education System Law No. 20 of 2003, stated that education is a conscious effort so that humans can develop their potential through learning processes and / or other ways known and recognized by the community. This means that humans throughout their lives need education in their lives and this is indirectly reflected in aspects of our daily lives. In Law No. 20 of 2003 concerning with Indonesia National Education System, Article 13 paragraph 1 states that the path of education in Indonesia consists of formal, non-formal and informal education.

Formal education According to the National Education System Law Republic of Indonesia,it is defined as a structured and tiered educational path consisting of basic education, secondary education and higher education (Suprijanto 2008). Formal education is a structured and tiered education pathway that consists of early childhood education (TK / RA), basic education (SD / MI), secondary education (SMP / MTs and SMA / MA), and higher education (University). Formal education consists of formal education with state status and formal education with private status. Characteristics of Formal Education include:

1. Learning place in the school building.
2. There are special requirements to become students.
3. The curriculum is clear.
4. Learning material is academic.
5. The education process takes a long time.
6. There is a formal examination.
7. Educational providers are government or private.
8. Teachers have a certain classification.
9. Organized with uniform administration

According to the Law National Education System non-formal education is defined as a pathway to education outside formal education that can be implemented in a structured and in several levels (Suprijanto, 2008). Non-formal education is a pathway to education outside formal education that can be carried out in a structured and in several level. Non-formal education is held for citizens who need educational services that function as substitutes, enhancers, and / or complementary formal education in order to support lifelong education. The results of non-formal education can be valued equal with the results of formal education programs after going through an equalization assessment process by an institution designated by the Government or Regional Government with reference to national education standards. Like the Institute for Training and Course, Study Group, Studio, etc. The characteristics of Non-Formal Education include:

1. The learning place can be outside the building.
2. Sometimes there are no special requirements.
3. Generally it does not have a clear level.
4. There are certain programs that are specifically intended to be addressed.
5. It is practical and special.
6. Education is short.
7. Sometimes there is a test.
8. Can be done by the government or the private sector

Informal education is education where the learning community is not intentionally learning and learning is not intended to help students learn (Suprijanto 2008). The characteristics of informal education are as follows:

1. There are no special requirements that must be completed.
2. Students do not need to take certain examinations.
3. The education process is carried out by the family and the environment.
4. There is no specific curriculum that must be implemented.
5. There is no level in the education process.
6. The education process is carried out continuously without knowing space and time
7. Parents are teachers for students.
8. There is no clear management in the learning process.

2. Literature Review and Hypothesis
2.1 Customer value
Customer value according to Kotler and Keller (2012) "Difference between total customer value and the perceived alternatives." Difference between total customer value and total customer costs. Total customer

value is a set of benefits expected by the customer of the product or service. Total customer value is a set of costs expected by consumers issued by consumers to evaluate getting, using and disposing of products and services. Whereas Schiffman and Kanuk (2004) define customer value as the ratio between benefits obtained by consumers both economically, functionally and psychologically to sources (money, time, effort, and psychological) that are used to obtain benefits that is, the product benefits related to reliability, durability, performance and resale value of the product or service offered. Customer value can be conceptualized as a comparison of weighted "get" attributes to "give" attributes (Heskett et al. 1994). Customer value is operationalized as a ratio or trade-off between total benefit received to total sacrifices, taking into consideration the available suppliers' offerings and prices (Buzzell and Gale 1987). Service consists of a wide variety of dimensions, and two of the most commonly examined service attributes are reliability and customization (Zeithaml 2000). The sacrifice or price that a customer pays typically consists of transaction costs, life cycle costs, and some degree of risk (Naumann 1995).

Graf & Maas (2008) have summarized some understanding of the customer value derived from several experts outlined in the following table:

Table 1. Understanding Customer Value

Woodruff (1997)	Customer Value is a "customer's perceived preference for and evaluation of those products attributes, attribute performance, and consequences arising from use that facilitate (or block) achieving the customer's goals and purposes in use situations."
Holbrook (1994)	Customer Value is "a relativistic (comparative, personal, situational) preference characterizing a subject's [consumer's] experience of interacting with some object … i.e., any good, service, person, place, thing, event, or idea."
Gale (1994)	"Customer Value is market perceived quality adjusted for the relative price of your product. [It is] your customer's opinion of your products (or services) as compared to that of your competitors."
Zeithaml (1988)	"Perceived value is a customer's overall assessment of the utility of a product based on perceptions of what is received and what is given.

Source : Graf & Maas (2008)

Table 1 above shows summary of some understanding of customer value quoted by Graf & Maas (2008) derived from several experts.

According to Albrecht (1994), there are seven elements that together form infrastructure in delivering customer value, namely environmental, sensory, interpersonal, procedural, deliverable, informational, and financial.

1. Environmental, the physical setting in which the customer experiences the products. This element is the physical environment in which consumers experience or feel related to the product.
2. Sensory, the direct sensory experience, if any, that the customer encounters. These elements include what is seen, heard, feeling, physical sensation, pain, or unpleasant, emotional reactions, aesthetic characteristics of merchandise items, and feelings related to the psychological environment of the consumer. Like the taste of food and drinks served to consumers.
3. Interpersonal, customer interaction with employees, in some cases, with other customers, as part of the loyal experience. Interpersonal elements are interactions that occur between consumers and other staff or consumers, which is part of the overall experience. Includes a sense of friendliness, friendliness, help, physical appearance, and competence of staff on duty.
4. Procedural, the procedure, you ask the customer to go through doing business with you. This element is a procedure applied by a business entity to serve when dealing with consumers.

5. Deliverable, anything the customer physically takes custody of during the service experience, even if only temporarily. This means that everything experienced by consumers when getting services, even on matters that are temporarily or supportive, such as the speed of delivery of products and delivery services provided.
6. Information, aspects of the customer experience that involves getting the information needed to function as a customer. This can be any information needed by consumers up to simple things such as an object or facility that makes consumers know where to go, and so on.
7. Financial, what is the customer pays for the total experience. In most cases it's obvious: it's the price. In others, it may be less obvious. This element relates to everything that consumers pay or sacrifice to get the experience or product.

2.2 Customer satisfaction

Customer is the person who does the buying of the products and the consumer is the person who ultimately consumes the product (Solomon 2009) When a consumer/customer is happy with either the product or services it is termed satisfaction. Satisfaction can also be a person's feelings of pleasure or disappointment that results from comparing a product's perceived performance or outcome with their expectations (Kotler & Keller 2009). Customer satisfaction is defined by Tse & Wilton (1988) as "the customer's response to the evaluation of the perceived discrepancy between prior expectations and the actual performance of the product or service as perceived after its consumption", hence considering satisfaction as an overall post-purchase evaluation by the customers" (Fornell 1992). Some authors stated that there is no specific definition of customer satisfaction, and after their studies of several definitions they defined customer satisfaction as "customer satisfaction is identified by a response (cognitive or affective) that pertains to a particular focus (i.e. a purchase experience and/or the associated product) and occurs at a certain time (i.e. post-purchase, post-consumption)". (Giese & Cote 2002). This definition is supported by some other authors, who think that consumer's level of satisfaction is determined by his or her cumulative experience at the point of contact with the supplier (Sureshchander et al. 2002). Customer satisfaction has also been defined by Kotler et al (2002) as the extent to which a product's perceived performance matches a buyer's expectations. According to Schiffman & Kanuk (2004) Customer satisfaction is defined as "the individual's perception of the performance of the products or services in relation to his or her expectations" (Schiffman & Kanuk 2004).

According to Kotler et al (2002) in determining the level of customer satisfaction, there are five main factors that must be considered by the company, namely:

1. Product Quality
Consumers will be satisfied if the results of their evaluation show that the products they use are of high quality.
2. Service Quality
Especially for the service industry, consumers will feel satisfied if they get good or appropriate service.
3. Emotional
Consumers will feel proud and get confidence that other people will be amazed at him when using products with certain brands that tend to have a higher level of satisfaction.
4. Price
Products that have the same quality but set a relatively cheap price will give a higher value to consumers.
5. Costs
Consumers who do not need to incur additional costs or do not need to waste time getting a product or service tend to be satisfied with the product or service.

2.3 Customer value and customer satisfaction

According to Oliver (1997), customer value will result from customer perceptions and experiences in the course of consumption. An optimal customer perception and experience is conducive to continued consumption. Butz and Goodstein (1998) consider that an unexpected higher level of customer value will result in a strong customer connection and greater customer loyalty. The service management literature argues that customer satisfaction is the result of a customer's perception of the value received in a transaction or relationship (Heskett et al. 1994). Theoretically, customer value can be considered a cognition-based construct capturing any benefit-sacrifice discrepancy, whereas customer satisfaction is primarily an affective and evaluative response (Oliver 1993). The social science literature indicates that cognitive thought processes trigger affective responses (Oliver 1993), suggesting that customer value judgments affect perceptions of satisfaction. Therefore, we draw the following model:
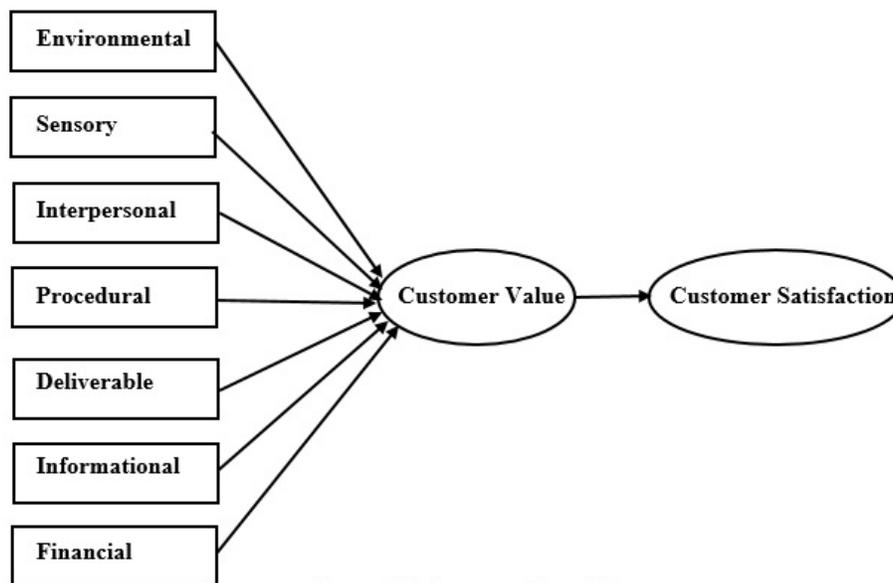

Figure 1: The research model

Figure 1 above shows that cognitive thought processes trigger affective responses (Weiner 1986) suggesting that customer value judgments affect perceptions of satisfaction.

3. Hypothesis

From the theory above we make the following hypothesis:

    Hypothesis 1: customer value has a positive partial effect on customer satisfaction

    Hypothesis 2: customer value has a positive simultaneous effect on customer satisfaction

    Hypothesis 3: environmental has the most dominant influence on customer satisfaction

4. Methods

4.1 Population and sample

According to Arikunto (2006) "Population is the whole subject of research." The population of this study is the students of 10 non-formal education institutions in Sidoarjo, Indonesia. Theare are total 240 population and we use Slovin Formula and taken 150 respondents as samples. We take 15 respondents from every non-formal education institution, we use simple random sampling technique. Data collection techniques using questionnaires with 5 choices, ranging from 1 (strongly disagree) to 5 (strongly agree).

4.2 Data analysis
The data analysis method used in this study is Multiple Linear Regression with with software of Statistical Package for the Social Sciences (SPSS) for window. Multiple linear regression analysis is the analysis of the dependent variable with factors that affect more than one independent variable. The general form of multiple regression equations is as follows:

$$Y = \alpha_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + e$$

Where:
Y: Customer satisfaction
α_0: Constants
β: Partial regression coefficient
X1: environmental
X2: sensory
X3: interpersonal
X4: procedural
X5: deliverable
X6: informational
X7: financial

5. Result and Discussion

Table 2. Result of t-test

Independent variable	t-count	Sig
Environmental	15.120	0.000
Sensory	3.224	0.004
Interpersonal	2.508	0.020
Procedural	7.424	0.000
Deliverable	11.804	0.000
Informational	2.113	0.044
Financial	4.080	0.000

Table 2 able shows the results of testing the regression coefficient with t-count obtained the value of environmental t-count of 15.120 > 1.97591, sensory 3.224 > 1.97591, interpersonal 2.508 > 1.97591, procedural 7.424 > 1.97591, deliverable 11.804 > 1.97591, informational 2.113 > 1.97591and financial 4,080 > 1.97591. Thus environmental, sensory, interpersonal, procedural, deliverable, informational, and financial variables significantly influence the variable customer satisfaction.

Table 3. Test Results for Regression Coefficients with F Test (simultaneous)

ANOVA[b]

Model		Sum of Square	df	Mean Square	F	Sig
1	Regression	5.836	7	.834	449.546	.000
	Residual	.041	142	.002		
	Total	5.877	149			

Table 3 above shows results of calculations using SPSS seen in table 3, the magnitude of F count is 449.564 while the value of F table is used at a significant level of 5% with df: n - k - 1 = 150 - 7 - 1 = 142, so the result of F table is 2.07. Thus F count 449.564 > F table: 2.07. So that conclusion of environmental, sensory,

interpersonal, procedural, deliverable, informational, and financial can be drawn together can influence the variable of customer satisfaction.

Table 4. r2 partial value

Independent variable	r partial value	r2 partial value
Environmental	0.955	0.9120
Sensory	0.566	0.3203
Interpersonal	0.471	0.2218
Procedural	0.845	0.7140
Deliverable	0.929	0.8630
Informational	0.414	0.1714
Financial	0.656	0.4303

Table 4 above shows the r2 partial value and based on table 4 above, it can be seen that the highest r^2 partial value is the partial value of the environmental variable which is equal to 0.9120 while the lowest r^2 partial value is the partial value of the informational variable which is 0.1714. Thus it can be concluded that environmental is the most dominant influence on customer satisfaction.

6. Conclusion

From all the regression coefficient testing it was obtained a conclusion that from the results of testing the regression coefficient with t-count obtained the value of environmental t-count of 15.120 > 1.97591, sensory 3.224 > 1.97591, interpersonal 2.508 > 1.97591, procedural 7.424 > 1.97591, deliverable 11.804 > 1.97591, informational 2.113 > 1.97591and financial 4,080 > 1.97591. Thus customer value has a positive partial effect on customer satisfaction; from the results of calculations using SPSS seen in table 3, the magnitude of F count is 449.564 while the value of F table is used at a significant level of 5% with df: n - k - 1 = 150 - 7 - 1 = 142, so the result of F table is 2.07. Thus F count 449.564 > F table: 2.07. Thus, customer value has a positive simultaneous effect on customer satisfaction. Environmental is the most dominant influence on customer satisfaction. It can be seen that the highest r^2 partial value is the partial value of the environmental variable which is equal to 0.9120 while the lowest r^2 partial value is the partial value of the informational variable which is 0.1714.

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