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# Measuring Client Satisfaction Level from Migration Manual Reconciliations system to Automatic Reconciliations system In Bank Danamon Indonesia Using Kano Model

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## ABSTRACT

*In banking industry, reconciliation software can help you rise to a range of regulatory, business and operational challenges. In this new, challenging operational environment, an automated reconciliation strategy has proved to be a mandatory system to help reduce costs and risk, to achieve compliance and improve transparency, efficiency and scalability. But migrating system is a big project, And like other big projects, sometimes the result are not satisfactory, to measure client satisfaction on this project, we use Kano Model to measure it, a theory of customer satisfaction and product development developed by Professor Noriako Kano in 1980.*

Keywords: *Kano, Customer Satisfaction*

## 1. Literature Review

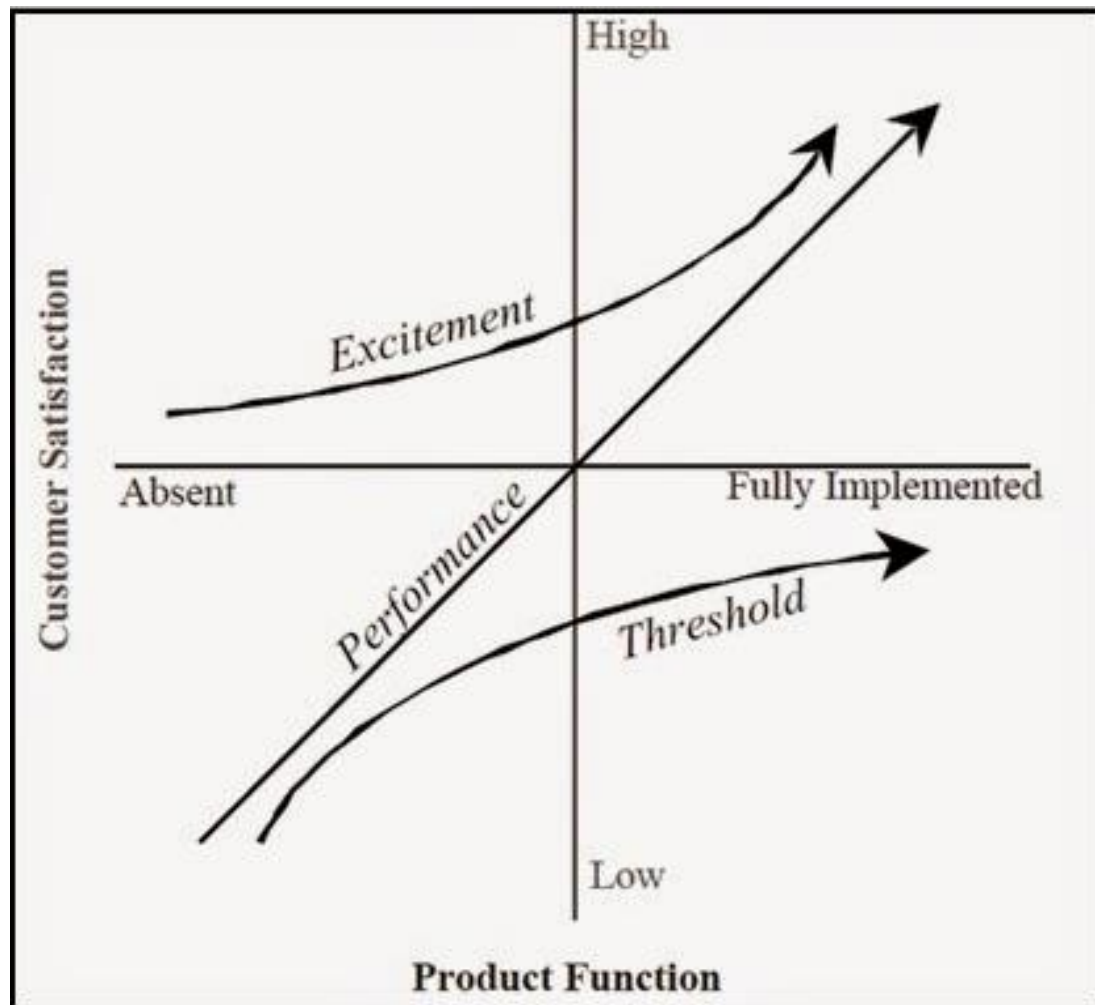
A bank reconciliation is a process performed by a company to ensure that the company's records (check register, general ledger account, balance sheet, etc.) are correct and that the bank's records are also correct (AccountingCoach).

Bank reconciliation begins with the company noting the balance per the bank statement and then make some notations about the balance. For example, the balance are probably not the amount that appears in the company's records. In all likelihood the checks written by the company in the previous days will not have cleared from the checking account. These are outstanding checks.

Moving reconcile system from using Access, other legacy system or even manual to automatic are a huge project, and also huge investment, Compare with the previous system, the latest system giving many improvement, most of the task are being done by system, not manual anymore, but still, this system giving the user the challenge to adapt and learnt new application, and also procedure to help them use it.

The Kano Model of Customer Satisfaction classifies product attributes based on how they are perceived by customers and their effect on customer satisfaction. (ISME) From the Kano Model perspective, there are 3 (three) types of customer needs (“What is the Kano Model” 2015. *microTOOL*,).

- **Basic Needs / Must Be Requirements**  
These are the main concern of the customer, without these, the customer will think the system are unusable
- **Performance Needs / One-dimensional Requirements**  
Most of the time, these are the reason why the customer want to upgrade their existing system to the new system, it can make their work faster and helping them reach their goal faster.
- **Excitement Needs / Attractive Requirements**  
These attributes are the attributes that exceed customer expectation, they will not realized that they need this attributes, until we gave them, and giving them extra satisfaction level



**Figure 1** Kano Model (AccountingCoach) “Kano Model of Customer Satisfaction and its Importance | ISME.” [Online]. Available: <http://www.isme.in/kano-model-of-customer-satisfaction-and-its-importance/>. [Accessed: 04-Oct-2016].

## 2. Research Methodology and Framework

Measuring customer satisfaction always becoming interesting research about how the measured are done, we are using Kano Model to measure the customer satisfaction level, and use questionnaire based on Kano, It is noted that without adequate information on the quality of services expected and perceptions received then feedback from customer surveys can be potentially misleading from both a policy and an operational perspective.

### 3. Data Sampling and Analysis

#### 3.1. Data Input

According to BDI (Bank Danamon Indonesia) there are 3 division that will use this system, with more or less 70 people that will be the user. To collect the data, the author gives the questionnaires to these representatives. There are 35 questionnaires from users that answered the 20 questions, 10 positive questions, and 10 negative questions. The questions focus on the new reconciliation system that they are tested. The questionnaire range is converted into Kano Model. (Kano Model)

#### 3.2. Data Processing

To evaluate the data result in Kano, we use these evaluation tables

Customer requirements		Dysfunctional (negative) question				
		1. like	2. must be	3. neutral	4. live with	5. dislike
Functional (positive) question	1. like	Q	A	A	A	O
	2. must-be	R	I	I	I	M
	3. neutral	R	I	I	I	M
	4. live with	R	I	I	I	M
	5. dislike	R	R	R	R	Q

Customer requirement is ...

**A:** Attractive

**M:** Must-be

**R:** Reverse

**O:** One-dimensional

**Q:** Questionable

**I:** Indifferent

And we can calculate the customer Extent of Satisfaction with these formulas

$$ES = \frac{A + O}{A + O + I + M}$$

and also Extent of Dissatisfactions

$$ED = \frac{(-1)(O + M)}{(A + O + M + I)}$$

A = Attractive requirement  
 O = One-dimensional requirement  
 M = Must-be requirement  
 I = Indifferent requirement

	M	O	A	I	R	Q	Total	Category	ES	ED
Feature 1	11	2	8	14	0	0	35	I	0.285714	-0.37143
Feature 2	10	2	8	15	0	0	35	I	0.285714	-0.34286
Feature 3	12	7	3	13	0	0	35	I	0.285714	-0.54286
Feature 4	16	3	0	16	0	0	35	M	0.085714	-0.54286
Feature 5	0	0	18	15	2	0	35	A	0.545455	0

#### 4. Result and Analysis

From the questioners, the author measures the customer satisfaction from 35 samples

From the table result, we can see that:

- Feature 1: have a ES value of 0,285714 and ED value of 0,37143, this means that this feature does not have significant value in customer satisfaction
- Feature 2: have a ES value of 0,285714 and ED value of 0,34286, this means that this feature does not have significant value in customer satisfaction
- Feature 3: have a ES value of 0,285714 and ED value of 0,54286, this means that this feature does not increase significantly user satisfaction, but having a huge negative impact on this user if it not implemented
- Feature 4: have a ES value of 0,545455 and ED value of 0, this means that this feature increase significantly user satisfaction, but having none negative impact if it not implemented
- Feature 5: have a ES value of 0,285714 and ED value of 0,54286, this means that this feature does not increase significantly user satisfaction, but having a huge negative impact on this user if it not implemented

#### 5. Conclusion

From the analysis based on the data above, we can conclude that:

Based on the Table result, we can see that from 5 feature in questionnaire, 4 of 5 had bigger ED than ES, that means most of the feature are closer to "must have" than extra feature, so the company know what should be improve in next project

## 6. Future Work

To improve this research about Client Satisfaction Level, we can use another method beside Kano Model methods, like SERVQUAL. We can also combine Kano Model with SERVQUAL methods to get better result of this.

Beside the methods, we also can improve this research by using another technique of collecting data. We can use more sample of data, and spread the questioners to all of officers of banks not only to the IT officers in order to get another perspective and opinion about the applications.

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