THE MEASUREMENT OF HERZBERG' EMPLOYEES SATISFACTION USING KANO METHOD

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ABSTRACT: This study is focused on how to measure and find out the employees satisfaction. Using Kano method and Likert scale which is developed in the questionnaire based on Herzberg theory related to Hygiene and Motivator factors, the results data of survey show inconsistency to each others. To find out what the elements for improvement priorities required by company, this study therefore proposes the Kano Manipulating Graph. This graph is generated based on Kano method related to quality attributes. The graphs show that the elements of Herzberg's Hygiene factors related to employees satisfaction can be constructed in quadrant of the Dissatisfaction (DS↑) high and Not-Satisfaction (CS'↑) high toward Dysfunctional (DF↑) and Not-Functional (F'↑) high. In this study, the element of Hygiene factors related to supervisory work and activities for employees' consultancy is the main improvement factor that should be taken immediately by company as a first priority.

KEYWORDS: *Hygiene, Motivator, Satisfaction, Kano, Kano Manipulating Graph (KMG).*

1.0   INTRODUCTION

Nowadays, in highly competitive markets, there are varieties factors contribute to the successful of the company to survive in the market. One of the factors is an organization's need to provide goods and services in order to satisfy the customer and make them as loyal customers. On this point of view, the customers are more likely to return when they are satisfied. On this point of view, the customers are more likely to return when they are satisfied. This means the company should not have to focusing their business merely on the quality and price factors of their products in attracting the customer for buying the product.

They are, however, also have to concern on how in retaining their very loyal customer for a key of their business survival [1].

Based on this reason, the internal customer as the importance asset to an organization should competitive for maintaining the market [2]. First, the company should, therefore, emphasize their attention on the internal dynamics of the organization and recognize what and how to meet the requirements of the internal customer so that meet the needs of the external customer [3]. On this perspective, quality problems of the product as a reflecting of the employees dissatisfy to their job [4]. Second, in [5] stressed that "*for an organization to be truly effective, every single part must work properly together*". This is due to the quality service delivered to external customer is often determined by quality of service that internal customer (employees) provided [6]. Hence, we can say that how importance the employees in dealing with the external customer, recognizing their satisfaction, and how to support the overall marketing strategy are essential for external customer satisfaction [7, 8].

To satisfy the external customer is greatly depending on a smooth running of process approaches to complete "a transaction" with them [9], while the internal problem is pertinent to the employees' dissatisfaction in the working environment with intrinsic and extrinsic factors [10]. This is as in [11] where the case of banking service in Kuwait noted about the customer satisfaction resulted from any dimension related to quality, whether or not, its judgment may arise from non-quality issues (e.g. needs, equity, and perceptions of "fairness"). Briefly, there is a positive linear relationship between staff satisfaction, service quality and customer satisfaction leading to profitability [12, 13].

However, [14] previously argued that relationship mentioned is not clearly state about how to differentiate the service quality constructed; distinguishing between functional service quality (FSQ) which means doing things nicely and technical service quality (TSQ) as doing things right (to the external customer, it is means related to the service forms and ways provided by company and their employees; while the internal, it means to employee satisfaction towards working environment, company policy and strategy in providing a better service to customers). This because of service quality required to improve customer satisfaction, many service industries should, hereby, pay the greater attention to service quality and customer satisfaction as the outcome (technical quality) rather only to simply addressing service quality from a functional perspective [14,15, 16]. In addition, the internal customers may have little or no choice, even though the internal customers are often able to decide not to comply with

prescribed procedure or standards or they can choose whether or how to cooperates [17].

Moreover, there is a little of theoretical or empirical work regards the impact of customer service existed when the concept of internal service makes intuitive sense [12, 18]. This is due to the concept of internal customer service used reflects the character of people's attitudes to one another and the way of people serve each other inside the organization [19]. Thus, the context of internal customer service viewed is as a two-way exchange process between individuals in different functional departments of a firm in which the provider should respond to the needs of their internal customer. On this reason, the improvements in internal service quality will results the improvement of the external service quality [19, 20]. An instance: the involvement of upper-management. Their involvement is not only crucial for every quality initiative, project, or program to improve organizational performance [21], but also it will motivate the employees to provides good service if the management take care of them [6].

Based on the reason above, this study is carried out to analyze the employee satisfaction through Kano model and Herzberg's Theory.

2.0   LITERATURE REVIEW

Job satisfaction is how employees feel with different aspect of their job. It can be defined as "the measurement of one's total feelings and attitudes towards one's job" [22, 23]. The job satisfaction measured is by simply proposing a holistic question whether an individual is satisfied or not [10]. According to [24], job factors can influence attitudes, which in turn, can influence turnover intention. Here, the effect of mood on the job is the important components of job attitudes and potentially important predictors of some job behaviors. Job attitudes are more often strongly correlate with the specific job behaviors rather social attitudes to specific behaviors [25]. This is due to [26], the employees have attitudes or viewpoints about many aspects of their jobs, their careers, and their organization.

Furthermore, since the study of the relationship between job satisfaction and performance has a controversial history, the researchers then began taking a critical look at the notion that a *"happy worker is a productive worker"* [26]. This due to most of the earlier reviews of the literature came out with a weak suggestion against the issue, where there were also somewhat inconsistent relationship between job satisfaction and

performance. The failure to find a strong relationship between job satisfaction and performance is due to the narrow means often used to define job performance [27]. In addition, the relationship between job satisfaction and performance was found to be even higher for complex (e.g., professional) jobs compared to the less complex jobs. Thus, it does appear that job satisfaction is, in fact, predictive of performance, and the relationship is even stronger for professional jobs. By continuing to take actions in addressing low job satisfaction is not only important for organizational effectiveness, but by not doing so, organizations can cause spillover of employees' low job satisfaction into their life satisfaction and well-being. It is because, if the employees satisfied with their job, they become happier and the product that produce or service that given to the customer can fulfill customer requirements.

2.1 Herzberg Theory

The factors that cause job satisfaction will different with the factors that cause the job dissatisfaction. To discover the things that can make people motivated and satisfied job are different from that make them dissatisfied [28]. Two factors that can influence individual performance are competence and commitment. Competence is the function of knowledge and skills gained from education, training or experience, while commitment is a combination of confidence and motivation. The individual will satisfy if intrinsically and extrinsically rewarded. The employee intrinsically rewarded if s/he perceives that individual performance resulted from the effort expended is important, interesting, challenging, and stretching. On this perspective, as in [29, 30] have approached to hygiene factors as "job content" that to lead to job dissatisfaction such as:

   a)   Company Policies & Administration: The feelings about the adequacy or inadequacy of company organization and management. This includes poor communications, lack of delegated authority, policies, procedures, and rules.
   b)   Supervision: The competency or technical ability of the supervisor. This includes the supervisors' willingness to teach or delegate authority, fairness, and job knowledge.
   c)   Interpersonal Relations: The relationships between the worker and his or her superiors, subordinates, and peers. This includes both job related interactions and social interactions within the work environment.
   d)   Working Conditions: Factors that involve the physical environment of the job: amount of work, facilities for performing work, light, tools, temperature, space,

ventilation, and general appearance of the work place.

e) Job Security: The employee's job tenure and/or the company's stability or instability objective signs of the presence or absence of job security, not the feelings of security.

f) Salary: This includes all forms of compensation and focuses on wage or salary increases or unfulfilled expectation of increases.

While to motivational factors; related to where workers do not tend to be dissatisfied when these factors are not present on the job, such as:

g) Growth: This includes actual learning of new skills, with greater possibility of advancement within the current occupational specialty as well as personal growth.

h) Work Itself: The actual content of the job and its positive or negative effect upon the employee whether the job is characterized as interesting or boring, varied or routine, creative or stultifying, excessively easy or excessively difficult, challenging or non-demanding.

i) Responsibility: This includes both the responsibility and authority in relation to the job. Responsibility refers to the employee's control over his or her own job or being given the responsibility for the work of others. Gaps between responsibility and authority are considered under the company policies and administration factor.

j) Achievement: This includes the personal satisfaction of completing a job, solving problems, and seeing the results of one's efforts.

k) Advancement: The actual change in upward status in the company. Increased opportunity changes with no increase in status are considered under responsibility.

l) Recognition: This is the recognition by others for a job well done or personal accomplishment.

On this point of view, workers who are "not satisfied" do not tend to restrict productivity; they just do not get involve in their job or put forth the extra effort to do a good job. Workers who are "satisfied" put forth that extra effort and productivity increases.

2.2   Kano Method

The Kano model offers some insight into the product attributes perceived to be important to customers. Kano's model is employed as a starting point of the proposed quantitative analysis that involves the

conducting of preliminary study, developing, and administrating the Kano questionnaire. On this method, the most frequent observations of the sample set of responses are considered as the final Kano category for CR (customer requirements) [31], where

a) Quantitative analysis of customer satisfaction into Kano's model is carried out by calculating two values which are "better" and "worse" in order to reflect the average impact of a CR on customer satisfaction (CS) or dissatisfaction (DS) of all customers as follows [32]:

i.) Coefficient of cause of satisfaction (CS):

$$\frac{O + A}{M + O + A + I} \tag{1}$$

ii.) Coefficient of cause of dissatisfaction (DS):

$$- \frac{O + M}{M + O + A + I} \tag{2}$$

b) In making decisions about product developments, the features that have to be taken into consideration for improvement are the features that has the greatest influence on the perceived product quality [33, 34], where their evaluation rule as follows:

$$M > O > A > I \tag{3}$$

In this formula, M stands for 'Must-be' requirements, O for 'One-dimensional' requirements, A for 'Attractive' requirement and I stands for 'Indifferent' requirements. It means that the range of 'Must-be' attribute have the largest range and it is large than the other attribute. This evaluation rule recommends the first taking those product requirements into consideration, which are allocated to the requirement Kano's method category M because disregarding of such elementary basic elements creates dissatisfaction [35]. The 'Indifferent' attribute has the least acuteness because it has only minor influence on the employee's satisfaction. If this attribute did not being fulfill, the employees will doesn't feel dissatisfy. Table 1 show the six categories quality attributes influenced to the customer satisfaction.

Table 1: Kano's evaluation table

		DYSFUNCTIONAL				
		1. Like	2. Must-be	3. Neutral	4. Live with	5. Dislike
FUNCTIONAL	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
A = Attractive ; M = Must- be; R = Reverse; O = One- dimensional ; I = Indifferent; Q = Questionable						

- Must-be Requirements (Threshold / Basic attributes). If these requirements are not fulfilled, the customer will be extremely dissatisfied. The must-be requirements are basic criteria of a product. Fulfilling the must-be requirements will only lead to a state of "not dissatisfied". Must-be requirements are in any case a decisive competitive factor, and if they are not fulfilled, the customer will not be interested in the product at all.

- One-dimensional Requirements (Performance / Linear). With regard to these requirements, customer satisfaction is proportional to the level of fulfillment – the higher the level of fulfillment, the higher the customer's satisfaction and vice versa. One-dimensional requirements are usually explicitly demanded by the customer.

- Attractive Requirements (Exciters / Delighters. These requirements are the product criteria which have the greatest influence on how satisfied a customer will be with a given product. Attractive requirements are neither explicitly expressed nor expected by the customer. Fulfilling these requirements leads to more than proportional satisfaction. If they are not met, however, there is no feeling of dissatisfaction.

- Indifferent Attributes. The customer does not care about this feature. Means that the customer is not concerned with this product attribute and is not very interested whether it is present or not.

- Questionable Attributes. It is unclear whether the customer expects this attribute. This situation occurs if there is a contradiction in the customers' answers to the paired questions. A questionable rating indicates incorrectly phrased question, misunderstanding of a question, or an incorrect response.

- Reverse Attributes: Means that some of the respondents' satisfaction decreases with the existence of this requirement, but they also expect the reverse of it.

3.0 METHODOLOGY

This study is carried out in a manufacturing industry related to how their employees' satisfaction as a case. The data and information related to their performance is categorized into the important level based on ranking level. The ranking level used is to generate the importance level to meet the customer needs, while Kano model is to determine what the factors that satisfy the customer.

Figure 1 shows the step of how the questionnaire developed refers to Herzberg theory using Kano method and Likert scale. Each of elements generated regards Herzberg theory are; related to hygiene and motivator factors, developed based on Kano pair wise of questions formulated so that the employees can answer in one of five different ways. The first question concerns to the reaction of the customer related to functional form of the question, while for the second question concerns to the reaction of dysfunctional form of the question. In this study, the survey questionnaire distributed is to 100 operators as the respondent.

The wording of the alternatives in the questionnaire developed, that is as the most critical choice, refers to the Kano methodology such as "I like it that way," "It must be that way," "I am neutral," "I can live with it that way," "I dislike it that way". While to Likert scale, the questionnaire developed using 5 scaling interval; "Strongly Like", "Like", "Nor Like or Dislike", "Dislike", and "Strongly Dislike".
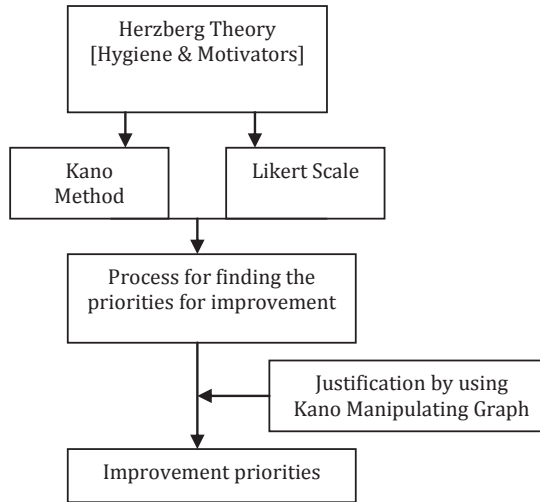
Figure 1: Flow to find the priorities improvements in using Kano & Likert Scale

4.0   RESULTS & DICUSSIONS

Table 2 shows the quality attributes of Kano method and mean value of Likert scale of each questions developed towards Herzberg attributes.

4.1   Based on Kano Method

Based on "M>O>I>A" [33], Table 2 shows that the company have to take action on element Q8 related to supervisory of hygiene factors. This is due to this element perceived by respondents as "Must-be" attributes. However, based on the number of CS – DS [32, 36], this element is ranked level Q2. The ranking level no.1 is on element Q25 since the negative values is -0.50 as the highest negative value. In addition, refers to Kano average, both are less than 2.5 together with Q1, Q16, Q25 which is means that the respondents feels 'It Must-be that way' to 'Neutral'.

Table 2: Herzberg [Hygiene & Motivator] in Likert vs. Kano Scale

HERZBERG		Q	Elements	AVERAGE		RANK & Attributes		
				Likert	Kano	L	K	CS-DS
HYGIENE F	COMPANY POLICY & ADMIN	1	Policy book	4.33	2.5	8	I	30 [0]
		12	Lunch hour	3.78	4.44	12	I	25 [0]
		13,14	Working hour	3.475	4.58	17	I	24,23[0]
		15	Uniform	3.28	4.72	20	I	22 [0]
		19	Documentation	3.56	5	14	I	20 [0]
		20	Communication	3.61	5	13	I	19 [0]
		22	Meeting	3.56	5	14	I	17 [0]
	SUPERVISORY	16	Instruction & task	3.5	2.5	16	I	8 [-0.06]
		18	Employees' difficulty	2.61	2.5	27	M	2 [-0.47]
	INTERPERSONAL RELATION'	11	Social activities	3.17	4.44	21	I	31 [0.06]
	STATUS	6	Transportation	2.39	2.78	28	I	4 [0.13]
		7	Hostel	2.3	3.89	29	I	7 [-0.06]
		8	Insurance	3.11	3.33	22	I	6 [-0.06]
		9	Scholarship	2.67	4.72	26	I	10 [-0.06]
	WORKING CONDITION	2,4	Equipment facilities	4.39	2.36	6	I	29,28 [0]
		3	air-con facilities	4.61	1.94	3	R	3 [-0.29]
		5	Space	4.39	2.78	6	I	27 [0]
	JOB SECURITY	24	Warning letter	2.94	5	23	I	15 [0]
		21	Decision approval	3.89	5	11	I	18 [0]
	SALARY	25	Salary payment	4.83	2.5	1	R	1 [-0.50]
		27	Increment salary	4.44	3.05	5	R	13 [0]
		28	Overtime payment	2.89	3.89	24	I	5 [-0.06]
		30	Allowance	2.72	3.61	25	R	9 [-0.06]
MOTIVATING	GROWTH	10	Training	3.39	4.72	19	I	26 [0]
	WORK ITSELF							
	RESPONSIBILITY	23	Discussion	3.9	5	10	I	16 [0]
	ACHIEVEMENT	17	Task completion	3.44	5	18	I	21 [0]
	ADVANCEMENT							
	RECOGNITION	26	Reward	4.5	3.33	4	R	14 [0]
		29	Commission	4.06	2.5	9	R	32 [0.13]
		31,32	Bonus	4.78	3.89	2	R	12,11 [0]

4.2   Based on Likert Scale

Based on Likert scale, we found that the lowest value of mean is on Q7. With the value of 2.3, this means that the respondents feel 'Dislike' to 'Nor Dislike and Like'. The respondents tend to feels 'Dislike', if the average values less than 3 in which the Herzberg elements involved are Supervisory (Q18), Status (Q6, Q7, Q9), Job Security (Q24), and Salary (Q28, Q30). The most of them is 'Status', due to the overall average 2.62 (less than 3).

4.3 Based on Hygiene and Motivator of Herzberg

Based on Kano method and Likert scale, we found the respondents feels dissatisfied. This is due to several the averages values refers to Likert and Kano method in Hygiene factors found less than 3. (Likert: Q18, Q6, Q7, Q9, Q24, Q28, Q30 ; Kano:Q1, Q16, Q18, Q6, Q2&4, Q3, Q5, Q29). Even though Q29 refers to Kano is less than 3, based on Herzberg theory this will not effect to dissatisfy the employees. While based on "M>O>A>I", the elements of Supervisory (Q18) is in "Must-be" attributes. Since this element is part of Hygiene factors, this factor should be improved where if it is not, it will bring to employees dissatisfied. This is due to the hygiene factors should be completely fulfilled first as the most fundamental for satisfaction results plus one or more elements of the motivator factors, where by fulfilling the elements of hygiene factors merely make the respondent to feels 'not dissatisfied'. Fulfilling the elements of motivator factors without completely elements of hygiene factors fulfilled will not make the workers satisfaction.

4.4. Kano Manipulating Graph (Kmg) Approach (Proposed for Justification The Improvement Priorities Required)

Since the satisfaction points and attributes resulted refers to Kano method, Likert scale, and Herzberg theory are in the different values for improvement priorities should be taken, on how to find the priorities for Herzberg elements to be improved, as in [37] proposed that "Graph of Kano Manipulating Values "= Ranking value of Likert ∩ Ranking value of Kano ∩ Ranking value of CS-DS ∩ "M>O>A>I".

On this, the graph depicts the comparison between the values of CS vs. DS and F (Functional) vs. DF (Dysfunctional) of Kano pairwise questions with the assumptions as follows:

$$\rightarrow \text{CS value} = \neg \text{ DS value},$$
$$\text{then DS value} = \neg \text{ CS value} \qquad (4)$$

$$\rightarrow \text{F value} = \neg \text{ DF value (or DF')}$$
$$\text{then DF value} = \neg \text{ F value (or F')} \qquad (5)$$

Figure 2a shows the graph for Kano related to Customer Satisfaction (CS) and Customer Dissatisfaction (DS) where Q18 is located in CS↑and DS↑, while in Figure 2b is located in CS'↑ and DS'↑. Since the improvement required is related to dissatisfaction first (DS↑, if we use only the graph CS vs. DS, we will confuse to choose which of elements

need to be taken for improvement made. This is due to in DS↑ area, there are elements existed such as Q25, Q3, Q8, Q9, and Q28 beside Q18 itself (Figure 2a). However, by constructing the comparison in reverse value (negation value) in Figure 2b, we found that the elements inside the CS'↑ area are Q6, Q8, Q18, Q21, Q23, and Q28. This means that only Q8, Q18, and Q28 are having same location based on assumption DS↑= CS'↑.
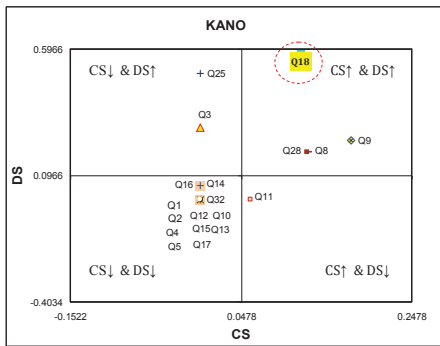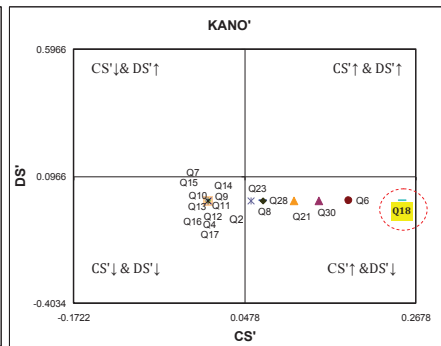

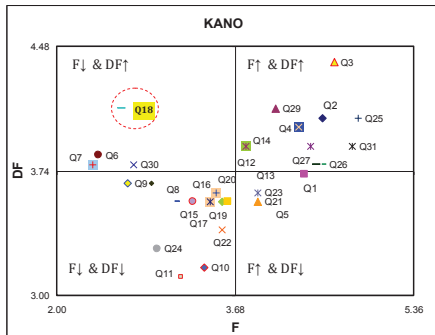Figure 2a: Kano [CS vs. DS]

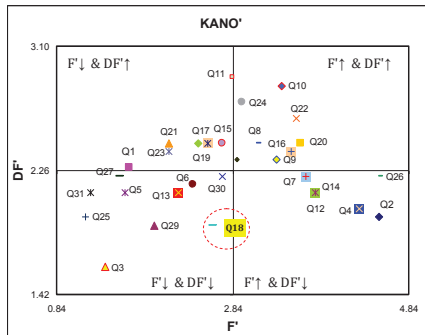Figure 2b: Kano [CS' vs. DS']

Figure 3a: Kano [F vs. DF]

Figure 3b: Kano [F' vs. DF']

In addition, since CS and DS values are rooted from the Functional and Dysfunctional of Kano pair questions (see 2.2), then we can make the comparison based on the proposed assumption into the graph shown in Figure 3a and 3b. By integrating Figure 2a and 2b to Figure 3a and 3b, we found as follows:

"Graph" = {CS vs. DS} ∩{CS' vs. DS'} ∩ {F vs. DF} ∩{F' vs. DF'}

= {Q25,Q3,Q8,Q9,Q18,Q28} ∩{Q6,Q8,Q18,Q21,Q28} ∩{Q6,Q7,Q18,Q30}

∩{Q3,Q5,Q6,Q13,Q18,Q25,Q27,Q29,Q30,Q31}

= Q18

Hence, we can conclude that element of Q18 is as the first priorities for improvement required since this element fulfil all of the criteria such as Herzberg theory, ranking level/mean values of Likert scale, Kano mean values, CS-DS, and Kano attributes, that are "Hygiene factor", "2.61 (<3)", "Rank 2", "2.5 (<3)", and "Must-be" attributes in respectively.

5.0   CONCLUSION

In articulating of what the satisfaction elements constructed for improvement required using Herzberg theory through the questionnaires developed, the approaches using Kano method and Likert scale (sometimes) produce the different results (inconsistency). This is as we can see from the different ranking level of the mean values. Although most scholars who are using Kano method; they proposed on how to look the most importance elements resulted from the survey, it seem, however, the ambiguity occurred to which elements for improvement or maintained should be taken.

Based on this fact, we therefore propose the way how to manipulate data of the survey resulted into the Kano Manipulating Graph (KMG). This is to prove what of the most priorities elements for improvement required by company. In this case, we do trial against the employees satisfaction measurement based on Herzberg theory, where the hygiene factors is a fundamental factors that will bring to customer satisfaction. By manipulating the values of customer satisfaction (CS) and dissatisfaction (DS), as well as the mean values of Kano in pairwise of functional and dysfunctional forms, the results show with consistently to the Likerts scale and also to theory of Herzberg related to employees' satisfaction.

In this study, we found the company has to carry out the improvement action against the "Supervisory" works, especially when the employee faced the difficulties in their work (Q18). This is one cause that will make the employee dissatisfied, if the company cannot fulfill their needs and/or to improve its.
Since the study carried out is limited to employee's satisfaction using Herzberg theory, the manipulating data of Kano approached into the graph need to be applied in others satisfaction theory for the future work.

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REFERENCES

[1]   T.O. Jones and W.E. Sasser, "Why Satisfied Customers Defect." *Harvard Business Review*, Vol. 73 No.6, 88–99, 1995.

[2]   S.R.S. Javadein, H. Rayej, M.Estiri, and H. Ghorbani," Role of Internal Marketing in Creation of Sustainable Competitive Advantages." *Trends in Applied Sciences Research,* Vol.6, 364-374, 2011.

[3]   P.E. Atkinson (1990) Creating Culture Change: The Key to Successful Total Quality Management. CA :Pfeiffer and Company, San Diego.

[4]   M.R. Osman, M.Y. Rosnah, N. Ismail, R.Tapsir, and M.I. Sarimin, "Internal Customer Satisfaction in ISO 9001 Certified Manufacturing Companies." *International Journal of Engineering and Technology,* Vol.1, No.2, pp 179-187, 2004.

[5]   J.S. Oakland and S. Oakland,   "The Links between People Management, Customer Satisfaction and Business Results". *Total Quality Management*, Vol. 9 No. 4/5, pp. 185-90, 1998.

[6]   J. Cook and T. Wall, "New Work Attitude Measures of Trust, Organizational Commitment and Personal Need Non-fulfilment. "*Journal of Occupational Psychology*, Vol, 53, pp. 39–52, 1980.

[7]   L.L. Berry, "The Employee as A Customer." *Journal of Retailing Banking*, Vol. 3 No. 1, pp. 33-40, 1981.

[8]   L.L. Berry and A. Parasuraman , "Improving Service Quality in America: Lessons Learned." *Academy of Management Executive* Vol. 8 No. 2 , pp. 32-52, 1994.

[9]   S. Farner, F. Luthans, and S. Sommer ,"An Empirical Assessment of Internal Customer Service." *Managing Service Quality*, Vol.11 No.5, pp.350-358, 2001.

[10]   R. Morgan, P. McDonagh , and T. Ryan-Morgan, " Employee Job Satisfaction: An Empirical Assessment Of Marketing Managers as An Occupationally Homogeneous Group." *Journal of Managerial Psychology*, Vol.10 No. 2, pp.10 – 17, 1995

[11]   A.M. Alhemoud, "Banking in Kuwait: A Customer Satisfaction Case Study." Competitiveness Review: *An International Business Journal,* Vol. 20, No. 4, pp.333 – 342, 2010.

[12]   R. Hallowell , "The Relationships of Customer Satisfaction, Customer Loyalty & Profitability: An Empirical Study." *International Journal of Service Industry Management*, Vol. 7 No. 4, pp. 27-42, 1996.

[13]   R.W.Y. Yee , A.C.L.Yeung and T.C.E. Cheng ,"An Empirical Study of Employee Loyalty, Service Quality and Firm Performance in the Service Industry." *International Journal Production Economic*, Vol. 124,pp.109-120, 2009.

[14]   V. Kumar, P.A. Smart, H. Maddern and R.S. Maull, "Alternative Perspectives on Service Quality and Customer Satisfaction: The Role of BPM." *International Journal of Service Industry Management*, Vol. 19, No. 2, pp. 176 – 187, 2008.

[15]   C. Grönroos ,"Marketing Services: the Case of a Missing Product". *Journal of Business & Industries Marketing*, Vol. 13 No.4/5, pp. 322-338, 1998.

[16]   G.D. Kang, and J. James, "Service Quality Dimensions: An Examination of Grönroos's Service Quality Model." *Managing Service Quality,* Vol.14 No. 4, pp. 266–277, 2004.

[17]   R.F. Lusch, T. Boyt , and D. Schuler, " Employees as Customers: the Role of Social Controls and Employee Socialization in Developing Patronage." *Journal Business Research,* Vol.35 No.3, pp.179-187, 1996.

[18]   L.L. Stanley and J.D. Wisner ,"Internal Service Quality in Purchasing: An Empirical Study." *Journal of Supply Chain Managemen*t, Vol.34 No.3, pp.50-60,1998.

[19]   J.L. Heskett, T.O. Jones, G.W. Loveman, W.E. Sasser Jr and L.A. Schlesinger, "Putting the Service Profit Chain to Work", *Harvard Business Review*, pp. 105-11, March-April 1994.

[20]   R. Schuler and S. Jackson, "Linking Competitive Strategies with Human Resource Management". *Academy of Management Executive*, Vol. 1 No.3, pp. 207-219, 1987.

[21]   J.K. Harter, F.L.Schmidt, and T.L. Hayes , "Business Unit Level Relationship between Employee Satisfaction, Employee Engagement, and Business Outcomes: A Meta Analysis. "*Journal of Applied Psychology,* Vol. 87, No. 2, pp. 268-279 , 2002.

[22]   G.H. Graham. Understanding Human Relations. The Individual, Organisations, and Management. Science Research Associates, Chicago Inc., 1982.

[23]   E.W. Graham and P.E. Messner ,"Principals and Job Satisfaction." *International Journal of Education Management.* Vol. 12, No. 5, pp. 196-202, 1998.

[24]   P. Hoonakker, A. Marian and P. Carayon, "The Relationship Between Job Characteristics and Quality of Working Life: The Role of Task Identity to Explain Gender and Type Differences", *Proceedings of the 2003 SIGMIS Conference on Computer Personnel Research: Freedom in Philadelphia*, 2003.

[25]   I. Azjen and M. Fishbein , " The Influence of Attitudes on behavior." In D. Albarracin, B. Johnson and M.Zanna (Eds). H*andbook of Attitudes and Behavio*r. Mahwah, NJ: Erlbaum, pp.173-221.

[26]   L.M. Saari and T.A. Judge ,"Employee Attitude and Job Satisfaction." *Human Resource Management*, Vol43 No.4, pp.395-407, Winter, 2004.

[27]   D.W. Organ , "A Reappraisal and Reinterpretation of the Satisfaction-causes- Performance Hypothesis." *Academy of Management Review* , Vol. 2 No.1,pp.46–53, 1977.

[28]   F. Herzberg, F. (1987). One More Time: How Do You Motivate Employees? Harvard Business Review, Vol. 65 No.5,pp. 109 – 128, 1987.

[29]   F. Herzberg. Work and the Nature of Man. Cleveland: World Pub., 1966.

[30]   F. Herzberg, B. Mausner, and B.B. Snyderman,. The Motivation to Work, 2nd ed.Wiley, New York, NY, 1967.

[31]   N. Kano, N. Seraku, F. Takahashi. and A. Tsuji, "Attractive Quality and Must-be Quality." Hinshitsu *The Journal of the Japanese Society For Quality Control,* pp. 39-48, April 1984.

[32]   C. Berger, R. Blauth, D. Boger, C. Bolster, G. Burchill, W. DuMouchel, F. Pouliot, R. Richter, A. Rubinoff, D., Shen, M. Timko and D. Walden, "Kano's Methods for Understanding Customer-Defined Quality." *Center for Quality Management Journal,* Vol. 2 No.4, pp. 3-35, 1993.

[33]   E. Sauerwin, F. Bailom, K. Matzler and H.H. Hinterhuber , "The Kano Model: How to Delight Your Customers." *International Working Seminar on Production Economics, Innsbruck/Igls/Austria*, , pp.313 -327, February 19-231996.

[34]   E. Sauerwein, " Experiences with the Reliability and Validity of the Kano-Model: Comparison to Alternate Forms of Classification of Product Development. " *Transactions of the 11*th *Symposium on QFD*, QFD Institute, Novi, MI, 12-18 June, 1999.

[35]   C. Zanger and G. Baier, "Händlerzufriedenheit mit Telekommunikationsgroßhändlern – Eine Empirische Untersuchung zum Methodenvergleich zwischen Conjoint – Analyse und Kano – Modell." *in Trommsdorff, V.* (Ed.), Handelsforschung 1998/99, Gabler Verlag, Wiesbaden, pp. 407-432.

[36]   T. Wang and P. Ji, "Understanding Customer Needs through Quantitative Analysis of Kano's Model." *International Journal of Quality & Reliability Management*, Vol. 27 No. 2, pp. 173-184, 2010.

[37]   H. Sihombing, M.Y. Yuhazri, S.H. Yahaya, M.Z.A. Yuzrina and A.A.Z. Azniz, "Revisited the Importance and Performance Analysis (IPA) and KANO Model for Customer Satisfaction Measurement. " *Global Engineers and Technologists Review*, Vol. 2 No.1, pp. 40-57, 2012.