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# Understanding Customer Satisfaction in the IT Outsourcing Environment: A Classification of Quality Attributes

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### **Abstract**

Customer satisfaction is important to outsourcing success and hence outsourcing contract continuation. However, with an increasingly competitive environment and a reportedly low success rate, maximizing customer satisfaction naturally tops the challenge chart for IT outsourcing vendors. This paper describes a research-in-progress that aims at first identifying the factors that influence customer satisfaction and then systematically classifying the factors into five different categories of quality defined in Kano's Theory of Attractive Quality. Once this study is completed, the research findings, specifically the classification, will be a contribution to the body of knowledge in IT outsourcing. The classification will also be valuable to vendors that want to satisfy their customers within the constraint of limited resources.

Keywords: IT outsourcing, customer satisfaction, theory of attractive quality, Kano, classification

# 1. Introduction

Information technology (IT) outsourcing is a strategic tool adopted by many organizations to meet internal needs [1]. Since gaining popularity in the late 1980s, the IT outsourcing market has continued to grow and has captured a large market share. It is estimated that by 2012, about 58% of the average organizations' IT budget will be with outsourcing vendors [2]. However, with an increasingly competitive environment and a reportedly low outsourcing success and contract continuation rate, maximizing customer satisfaction naturally tops the challenge chart for IT outsourcing vendors.

At present, the level of customer satisfaction is low. This is evident from reports that point to high level of outsourcing failure and low level of contract continuation. According DiamondCluster International [3], 78% of organizations that have outsourced an IT function have to terminate their agreements More than 30% of outsourcing agreements fail [4] while 47% of customers look to switch vendors [5]. While offshore outsourcing remains the largest segment in IT outsourcing, only 33% of clients are satisfied with their offshored vendors [1]. All these figures suggest a high level of dissatisfaction among IT outsourcing customers.

The low satisfaction rate couples with the fact that customer satisfaction is a key factor to outsourcing success [6] makes it is absolutely critical for vendors to understand the factors that contribute to customer satisfaction. At the same time, it is important for vendors to be able to differentiate factors that have higher impacts from those that have much lower impacts. Such need arises from that fact that customers will always have infinite number of requirements while vendors have limited resources to meet all customer requirements. This paper describes a research-in-progress that aims at first identifying the factors that influence customer satisfaction and then systematically classifying the factors into five different categories of quality defined in Kano's Theory of Attractive Quality.

The rest of the paper is structured as followed. Section 2 presents a summary of the literature related to customer satisfaction in IT outsourcing while Section 3 describes the Theory of Attractive Quality. Section 4 outlines the two-phase research methodology that will be adopted in this study. Section 5 highlights potential contributions of this on-going study.

# 2. Existing Literature of Customer Satisfaction in IT Outsourcing

Customer satisfaction is about the fulfilment of client needs. It is an assessment from customers that a product or service provides a "pleasurable

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level of consumption-related fulfilment" [7]. Such an assessment often lies on customer perceptions towards the "quality" attributes of products or services received. Ensuring customer satisfaction is critical as it is the key to attract clients [8], build customer loyalty [9], and ensure outsourcing success [6].

There is a number of existing IT outsourcing research that examines different quality factors that affect customer satisfaction. These quality factors can be grouped into four types: service quality, solution quality, service level agreement (SLA) quality, and relationship quality. Table 1 summarizes these four types of quality along with their associated dimensions while the following briefly discusses each of the quality.

Service quality refers to "the conformance to customer requirements in the delivery of a service" [10]. Service quality is the source of competitive differentiation [6, 11] especially when the number of vendors offering similar outsourcing services has increased over the years [6]. Service quality is consists of five dimensions: tangible, responsiveness, assurance, reliability, and empathy [6, 12, 13]. When the service quality customers receive is greater than what they expect, then customer satisfaction is being achieved [14].

Solution quality refers to the extent to which the products or services provided by vendors help customer to solve their problems or improve their business needs [15]. The literature suggests that solution quality should measure the quality of vendors' solution in term of their innovativeness, their effectiveness in solving the business problem, their operating efficiency, the integration of the solution with other systems [6], and the information quality [16].

Table 1: Types of quality in an IT outsourcing

Types of quality	Dimensions of quality	Sources
Service quality	Tangibles	[6, 10, 14]
	Reliability	
	Responsiveness	
	Assurance	
	Empathy	
Solution quality	Innovativeness	[6, 15]
	Effectiveness	
	Efficiency	
	Solution integration	
SLA Quality	Contents	[18, 19,
	Reliability	21, 22]
	Clarification	
	Scalability	
Relationship	Commitment	[10, 24,
Quality	Cultural compatibility	25, 26, 27,
	Flexibility	28, 29]
	Trust	
	Consensus	
	Interdependence	

In an outsourcing context, service agreement level (SLA) refers to the "detailed formal contract between the two contracting parties" [17]. SLA is critical to successful outsourcing projects [18] as it identifies service commitments of both the customers and the vendors [19]. A good quality SLA should contain specifications and precise requirements as it sets up expectations between customers and vendors [20]. SLA quality includes three major components: content [19], reliability of SLA [21], and clarification level of the SLA [22].

Good relationship quality refers to "a relationship between service provider and customer that involves high levels of trust and commitment, quality communication, cultural similarity, and balanced interdependence between entities in the service partnership" [10, p. 3]. The relationship between customers and vendors is complex. It more than a mere involves contractual transaction-based relationship [23]. relationship attributes have been used to study relationship quality in Marketing and IS research [e.g., 24, 10]. A synthesis of the literature shows that trust, commitment, communication, cultural compatibility, consensus, flexibility, interdependence are dimensions that positively impact the quality of a relationship [10].

# 3. Theory of Attractive Quality

The Theory of Attractive Quality was introduced by Kano [30] to help organizations understand the degree of sufficiency of a product or service quality and how customers evaluate that quality. Through customer evaluation of different quality of a product or service, organizations will be able to know the importance of each quality to customers. Through this way, they will be able to focus their efforts in areas that matter to customers. According to this theory, there are five categories at which customers will classify the quality of a product or service. These categories are attractive quality, one-dimensional quality, must-be quality, indifferent quality, and reverse quality.

Attractive quality provides satisfaction to customers when it is fully achieved but does not cause dissatisfaction when it is not being fulfilled [30]. This quality is not normally expected by customers. Instead, it is the vendors that take the initiatives to introduce a "surprise" element into its product or service. Therefore, the presence of this quality brings delights to customers but the absence of it does not cause any disturbance.

One-dimensional quality is positively related to customer satisfaction [31]. It results in satisfaction when it is being fulfilled and causes dissatisfaction when it is not being fulfilled [30]. The more the fulfilment of this quality, the more satisfied are the customers. Due to this nature,

one-dimensional quality is also called the "themore-the-better" quality [32].

Must-be quality is a basic quality that is expected and taken for granted by customers [30]. Its presence does not have any effect on satisfaction. However, its absence will bring dissatisfaction. This is because customers expect vendors to understand and incorporate all basic elements they would want in a product or service [33].

Indifferent quality is neither good nor bad. Consequently, it does not result in customer satisfaction or dissatisfaction [34]. The reason why customers are indifferent to a quality is that they either do not need or are not aware of the quality. It is possible that an indifferent quality will become an attractive quality once customers learn about it.

Reverse quality is negatively related to customer satisfaction [34]. The more this quality is present in a product or service, the higher the customer dissatisfaction. For example, some customers who wish to have only basic features of a product may express dissatisfaction when they are presented with complicated features that may end up confusing them [35].

A quality of a product or service can change over time [36]. A successful quality often follows a life cycle from being indifferent, to being attractive, to being one-dimensional, and ultimately to being a must-be item [34, 36]. For example, when a quality of a product or service is first introduced to a market, it might not be interesting enough to attract customer attention. This leads to a state of indifference among customers. Then, in the growth phase, the quality slowly captures the attention of customers. However, since it is a new quality, its presence brings customer satisfaction but its absence does not have any effect on customers. This is the state where the quality is said to have an attractive nature. After continuous and frequent usage, the perception towards the quality of the product or service becomes onedimensional where customer satisfaction and dissatisfaction rely on degree of achievement of that quality. As customers accept and grow accustomed to the quality, they expect it to be the basic part of the product or service. This is the must-be state where customers will not express satisfaction with the presence of the quality. However, they will show dissatisfaction if that quality disappears.

# 4. Methodology

To achieve the research objective, we have planned a two-phase study. The goal of the first phase study is to compile a list of quality that concerned customers in an IT outsourcing agreement. To do so, a case study method will be adopted. Existing outsourcing literature (i.e., the types of quality and their dimensions shown in Table 1) will guide the semi-structured interview sessions. The target sample is about 10 to 15 small-and-medium-sized enterprises currently have an IT outsourcing agreement. The target respondents are IT managers who manage the outsourcing contracts. In the case where an organization has more than one active agreement, the respondents will be asked to focus on the oldest agreement. This is due to the fact that the longer the duration of an agreement, the clearer the managers should be towards the types of quality they would expect from the outsourcing relationship. This is the stage where we are right now for this research, i.e., collecting interview data from managers.

The goal of the second phase is to extract customer classification of the qualities using the five different categories of Kano's Theory of Attractive Quality. A survey research method will be adopted to collect data from about 100 small-and-medium-sized enterprises. Just as in Phase 1, the target respondents are managers who manage IT outsourcing contracts. To ensure proper data extraction and classification, the procedures to design and develop questionnaire as prescribed by Kano et. al. [30] and other researchers that implement the Theory of Attractive Quality [e.g., 34] will be adopted.

# 5. Potential Contributions

To the knowledge of the authors, this is the first study that applies the Theory of Attractive Quality to the context of IT outsourcing. By doing so, it introduces a complementary yet different perspective of examining the issue of customer satisfaction. Furthermore, the classification of qualities into different categories is also new to the IT outsourcing literature. Such classification is especially valuable to vendors as they will gain an understanding on how their customers different quality aspects of an outsourcing service. This way, they will be able to focus their limited resources on promoting would qualities that increase customer satisfaction and possibly disregarding those that do not have significant impact on customer satisfaction.

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