

## **LITERATURE STUDY ON SATISFACTION FACTORS OF CUSTOMERS IN CONSTRUCTION INDUSTRY**

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**Abstract** - Customer satisfaction is decisive for construction field and firms relying on customer's relationship. Measuring the customer satisfaction has several benefits such as for improving communication between parties, evaluation of progress towards goals and enabling of mutual agreement and monitoring results. This paper focuses on analysing the satisfaction factors of customers including all aspects of products and services in the construction projects. In this study factors for customer satisfaction in construction industry are taken from the past literature review. The literature reviews are summarized and various factors related to customer satisfaction in construction industry based on literature review summary.

**Keywords**— *Customer Satisfaction, Factors, Construction*

### **I. INTRODUCTION**

Customer satisfaction is an important factor in the phenomenon of the construction process and customer relationship. As Construction Company's increases its antagonism, greater attention continues to be placed on customer relationships and satisfied customers. Customer satisfaction accredits construction companies to differentiate themselves from their competitors and create sustainable advantage. Those who buy the goods or services provided by companies are customers. In other words, a customer is a stakeholder of an organization who provides payment in exchange for the offer provided to him by the organization with the aim of fulfilling a need and to maximize satisfaction. Sometimes the term customer and consumer are confusing. Companies use numerous forms of customer satisfaction accessions in developing and monitoring service offerings in order to manage and improve customer relationships. Measuring customer satisfaction has several benedictions for organization's: Improvement in communication between parties and enable mutual agreement, A recognition of the demand of improvement in the process, Better understanding of the problems, Interpretation of progress towards the goal and Monitoring and reporting accomplished results and changes.

Customer satisfaction has become one of the key issues for companies in their efforts to improve quality in the competitive marketplace. It can be seen as either a goal of or a measurement tool in the development of construction quality. The objective of this paper is to examine and deepen the understanding of customer satisfaction factors in the construction projects. The following sections discuss these efforts with a literature review

### **NEED OF STUDY**

The main objective of this study is to identify the factors of customer satisfaction in construction. Customer satisfaction is one of the critical success factors for construction and all companies. Improving quality and customer satisfaction has received extensive attention. Customers want all utility and service and quality from the beginning till the end of the project. It should present a good appearance. Customer need good climate and its effect, customer needs their requirements. Customer also reflected on cost.

### **II. LITERATURE REVIEW**

The literature review is carried out to identify factor of customer satisfaction in construction firms. This is the various research review regarding factors of customer service satisfaction in construction works.

Mona N. Shah, Vineet Raitani, Aditya Oza and Kunal Gupta(2017) "Customer Satisfaction Study Of The Mumbai Metro Service". In this study they investigated about the service quality of the metro service based on the performance leading to customer satisfaction. The survey was conducted and analyzed with SPSS tool. This survey is based on Gap 5 SERVQUAL model and identified the level of satisfaction with their parameters.

Pooria Rashvand and Muhd Zaimi Abd Majid (2014) "Critical Criteria on Client and Customer Satisfaction for the Issue of Performance Measurement". The outcome of this paper is to establish the client and customer satisfaction criteria as the two key stakeholders in construction project for the issue of performance measurement based on the reviewed data. The methodology of this study is based on comprehensive literature review of performance measurements for client and customer whereby the data were analyzed, using the metrics which the additive number of each customer and client-satisfaction criteria are occurring in previous study. From the metric analysis, the common factors for customer and client satisfaction were ranked. From the analysis of this paper, it can be concluded that expectation and perception are the two common critical satisfaction criteria for client and customer that must be considered where the satisfaction is required.

Zeljko M. Torbica and Robert C. Stroh(2001) "Customer Satisfaction in Home Building". This study examines the home builder's performance measured by the home buyer's satisfaction. In this paper 16 home builders are participated and 300 valuable inputs are used & model for the customer satisfaction is evaluated.

Natalia Yanovaa(2015) "Assessment of Satisfaction with the Quality of Education: Customer Satisfaction Index". In this paper, monitoring the opinions of consumers of educational services is an effective tool for management decisions to optimize the educational policy in feedback mode. Consecutive improvement of public assessment measurement tools provides a more accurate and reliable feedback from consumers of educational services.

Jam Shahzaib Khan and Salim Khoso(2014) “Strategic Management for Customer Satisfaction within Construction Projects”. In this paper they initiated how the customer satisfaction is practiced in the Pakistan region and developed the model with the project management tool. The application of the strategic management is carried out in that region and analysing the outline incentives and barriers in implementing and delivering corporate social responsibility in with in construction projects.

Samira Dezhkam, Farzaneh Ghanbarpoor, Nazanin Shabani, Forooz Pishgar and Mahboobeh Ashoori(2013) “The Impact Of Product Innovation On Customer Satisfaction And Customer Loyalty”. In this paper is to on customer orientation in two major ways. Customer assimilation has typically been measured by self-reports from service employees. Customer acclimatization has been shown to have a positive impact on performance. From this analysis, improving customer satisfaction has been identified as one of the major challenges in the whole construction industry. Customer orientation and transformation management and have been widely recognized as key factors in enhancing the business performance.

Tunde Akinola Folorunso and Oluwaseyi Alabi Awodele(2015) “Assessment of Client’s Needs and Satisfaction at Various Stages of Building Projects Delivery Process in Lagos State”. In this study, the clients’ needs and satisfaction based on the attached level of importance and the perceived level of satisfaction from the local building contractors were discussed. A structured questionnaire was used for the study and obtain the data were statistically analyzed to find out mean importance indices and mean satisfaction indices, the mean indices differences and the significance of the differences using t-test.

Ghaleb J. Sweis, Rana M. Imam, Ghaith M. Kassab and Rateb Sweis(2013) “Customer Satisfaction in Apartment Buildings: The Case of Jordan”. In this paper, convergences on apartments in Amman (the Jordanian capital) to identify, describe, and measure factors contributing to customer satisfaction with apartment housing. Four segments were chosen to integrate significant variation in the apartments’ materials, finishes, amenities, and budgets into the data. They conducted a survey to explore customer satisfaction with apartment housing in Amman. Residents in zone A were found to be the most satisfied with their apartments. In addition to identifying the zone which contained the most satisfied inhabitants, we identified variables that significantly affect resident’s satisfaction with their housing.

Abayomi Omonori and Akinloye Lawal(2014) “Understanding Customers’ Satisfaction in Construction Industry in Nigeria” This paper showed that customer satisfaction has a positive effect on the contractor’s patronage. The study also authorized that there is significant correlation between customer’s satisfaction and patronage in the construction industry. It can be concluded that for any construction project, the delivery within the budget of the customer is very important in order to satisfy the customer. The study also revealed that the customer satisfaction affects the future of the company and increases the cash flow/profit of the company.

Abdulhamid Shebob, Amit Mhalas and Raj Kapur Shah (2013) “A Review Of Customer Satisfaction Factors In Libyan Housing Projects”. In this paper, the satisfaction factors of customers including quality aspects of products and services in the construction projects were analyzed. A framework was developed to evaluate the dynamics relationship between customer satisfaction and quality products or services, aiming to help companies’ managers and policy makers to understand the needs and points of view of their customers. And results indicate that there is a high demand of improvements in the contractor’s performance in terms of cost, time and quality of products.

P.Meenakshi(2016) “Customer Satisfaction in Construction Industry”. The main objective of the study is to find the parameters of customers who bought flat. The survey is conducted with the questions farmed by considering the points given by both customers as well as the flat promoters. The questionnaire survey was conducted among two types of customers. The survey results were analysed and identified the important factors of customer satisfaction.

Rathod Piyush, Dr.Rajiv Bhatt and Dr. Jayesh Pitroda(2016) “Study of Factors Affecting Customer Satisfaction for Residential Flats in Surat and Ahmedabad city in Gujarat Region of India”. In this paper, factors affecting the customer satisfaction among the residential flats are analyzed in the region. They find the satisfaction and un satisfaction factors from flat owners .They find out the factor for customer service satisfaction and un satisfaction factor such as Builder reputation, Materials & Method Used In Construction, Location Of The Building, Aesthetic Appearance Of The Building, Security Provisions, Fire Safety and Protection, Size and space of rooms, Drawing Or Living Room, Bathroom, Area Calculation, Ventilation, Water supply, Parking, Recreational Facilities and Interiors of building.

Chimene Obunwo; Ezekiel Chinyio and Subashini Suresh(2014) “Quality Management Practices And Customer Satisfaction Antecedents In Government Construction Projects”. The findings from the study indicate that there exists a relationship between the outlined quality management practices and customer satisfaction while handling government construction projects. Analysis of the empirical data obtained shows that the antecedents of customer satisfaction are greatly influenced by the adopted strategy to implement quality management.

### **III. SATISFACTION FACTORS**

Customer satisfaction factors are discussed below from the previous literature studies. We find out some common factors from the previous study. According to the performance the factors are grouped with some satisfaction criteria such as,

- Preconstruction stage.
- Site personnel.
- Construction stage.
- Contradistinction, drawings and handing over.
- Principal measures.
- Quality of service.
- Resources' management.

- Predilection.
- Timelines.
- Client orientation
- Communication.
- Cost.
- Safety.
- Response to complaints.

The main category for the customer satisfaction factors are

- Quality assurance and handover
- Environment and safety at work
- Site supervision and subcontracting
- Personnel
- Co-operation

Customer perception related factors

- First call resolution
- Agent demeanor: politeness, friendliness emotional support
- Agent know-how: knowledge, justification & explanation
- Anticipation of customer requests
- Perceived queuing time
- Personalized service

#### **IV. MEASURING A SATISFACTIONFACTORS**

For effectively measuring a customer satisfaction the following steps are considered:

- Customer satisfaction
- Understanding what customer satisfaction includes and what it means.
- Defining what needs to be measured.
- Choosing the measurement method.

The steps are discussed below

- A. Customers: Customers are the purpose of organizations activities instead of depending on a company, organizations very much depend on them. A customer, when considering construction projects is defined as a person, or group of people who purchase, pay for, or utilize the construction product or service.
- B. Satisfaction: Satisfaction is defined as the result of some comparison process in which expectations are compared with what is actually received. The word “satisfaction” has many definitions:
  - Satisfaction is merely the result of “things not going wrong”;
  - Satisfying the needs and desires of the consumer;
  - Satisfaction•as•pleasure;
  - Satisfaction•as•delight;
  - Customer assessment of the quality of goods and services.
- C. Subject to measure: Customer satisfaction calibration includes the collection of data that provides orientation about how satisfied or dissatisfied customers are with a service/product.
- D. Methods of measurement: Any method that gathers customer feedback id good, but for effective measurement, appropriate methodology needs to be found.
  - Customers to help describe the service and to segment customers if applicable – e.g. focus groups, depth interviews, observation etc.
  - Stakeholders (heads of policy, strategy, insight and channel directors) to help set the policy context and key objectives – e.g. interviews, meetings and consultation.
  - Customer-facing staff – e.g. interviews, consultation and even work-shadowing to enhance understanding of how the service works in practice.

#### **V. CONCLUSION**

The work presented in the paper has focused on the analysis of the satisfaction factors of customers on construction projects. The general characteristic of various customer satisfaction factors which influences on the construction industry has been studied through various authors and literatures. Every construction organisation in the country has the responsible to consider such factors for the successful practices of construction industry.

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