# Value of Customer Feedback in Quality Management for Construction Quality Improvement: Initial Perspective Review

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#### Abstract

In the current era, customer in construction field has become more advanced and sophisticated. Customer feedback can be a tool for quality enhancement if it is sorted out accordingly. This initial review, examines construction field towards its client satisfaction and quality enhancement. For instances, measurement tool such as Construction Quality Association (RALA) feedback system and Customer Relationship Management (CRM) will be discussed briefly based on its application, benefits and challenges. Moreover, client satisfaction towards contractor and project management that could affect its product and service quality will be also discussed on this paper. In construction, the main benefit of good customer satisfaction will be an opportunity to attract potential customers and remain the current clients in future projects and services. Furthermore, it could be one of the keys to improve their service quality in the competitive market.

**Keywords** — construction, RALA's Feedback System, CRM, factors, challenging.

## I. INTRODUCTION

Customer feedback is a vital part of a customer orientated methodology, giving the fundamental data concerning the customer's needs and necessities. Customer feedback has turned into a critical part of the activity of numerous associations in the course of recent decades, particularly those in the administration division where customer feedback is perceived as a fundamental commitment to the accomplishment of the business. Critically, it has been demonstrated that customer needs and qualities are really unexpected since people more concern on satisfaction for what they have invested on. The most immediate and viable approach to pick up and build up a comprehension of the customers' needs and qualities is to solicit, regularly through the straightforward instrument from customer feedback in numerous parts of life, from burger restaurants to buying new cars [1].

As needs to be, consumer satisfaction is an important factor in the development of the construction process and the customer relationship. Customer satisfaction and esteem can be seen either as an objective or as a measurement tool in the

development of the quality of the construction process. Progressively construction companies have received customer satisfaction as a one of the achievement components of an undertaking.

Organizations should utilize multiple tools to quantify customer satisfaction in creating and monitoring products/services with a specific end goal to manage and improve customer relationships and quality. Customer feedback empowers construction companies to separate themselves from their rivals and gain sustainable advantages. Estimating customer satisfaction is an additional essential for associations, for instance, in enhancing communication between parties, enabling mutual agreement, assessing progress towards the objective, and checking results and changes. It is additionally one basic property of Total Quality Management (TQM), which construction firms are adopting in their quality improvement effort [1].

This paper analyses customer feedback as a measurement tool to achieve customer satisfaction in the construction industry as it is still under-researched. Therefore, the fundamental objective of this paper is to explore the feedback methods, features, principles, factors, challenges, effects and benefits of feedback system for construction industry.

## II. METHODOLOGY

This paper discussed on the hybrid process which is the combination of product and service component which the process of developing a project of construction that is neither an unmixed service nor unmixed product. The demand for product of construction is only gain when there is a demand for the intended use of facility. For instance, to produce a car, auto parts and assembly parts are used and to come across the demand, Auto Company will make an agreement to design and construct the parts facilities.

To produce a physical product, contractor needs to provide three elements of services which are service product, service environment and service delivery. Service product involves specific features, service specifications and targets. Specific features can be quality assurance, progress reports and warranties. The service product involves what the customer receives additionally to the physical product.

On the other hand, the study on factors that involves in contractor selection and satisfaction to customers was conducted by researchers at North Dakota State University which stated five selections and satisfactions for electrical contractor. The criteria that customers needed are contractor and customer relationship, project management, safety, skilled workforce and cost of the project [2].

## III. APPROACH IN EVALUATION

In this paper, two approaches will be review for the construction in order to improve customer satisfaction.

## A. RALA Approach

This article studied the result of consumer feedback and quality in construction. The emphasis is on process quality, despite the fact that there are a few things, for example, quality confirmation and handover, which allude to the specialized quality and physical components of the development result. The information for this examination was created as a component of the Construction Quality Association (RALA). RALA is an autonomous joint affiliation offering evaluated data for the Finnish development and land area. RALA's feedback framework is a standard assessment, starts from input, utilizing feedback and generates the feedback outcome for improvement.

This input framework gives serviceable and resource-saving methods for gathering customer feedback. Feedback data from this framework may likewise be viewed as more target than a contractual worker's own particular input review, since social connection segments don't exist. The survey utilized was created in master gatherings with an extensive range of representatives from construction administration and the land business in Finland. While this examination is among the first to quantify consumer loyalty in the Finnish development industry, it isn't without constraints.

RALA's feedback input framework is an improved model, which should be produced towards the structure introduced in the former section. The assessment procedure of the principal encounters of the input display is at a beginning period and the feedback demonstrates will be made in stages. Staged formation of the model is essential for two reasons. Initially, in this stage the fundamental goal was to get the customers to focus on embracing the model and to obtain the contractual workers' endorsement for a model. The second goal was to improve the quality and customer satisfaction from the gatherings. Henceforth, the feedback show was not made exclusively for investigate purposes; it is created as a reasonable device to help with enhancing the quality administration. [4]

The fundamental benefit of high consumer satisfaction for a contractual worker is the chance to remain a client's potential accomplice later on. The

fundamental goal in enhancing consumer satisfaction is to accomplish customer reliability, which can lead, for instance, to banding together courses of action between the customer and the contractual worker.

The advantages for contractual workers are, acknowledgment of the interest in development all the while, better comprehension of issues, assessment of advance towards the objective, sees dark spots in the process on venture level and enhances picture of organization and entire development industry. With respect to customers are, creating co-task methodology and trust seeing someone, lessening no clarity amid venture and enhancing learning of the elements of consumer loyalty and administration quality in the development store network.

Utilizing the customer input framework, the customer would set up objectives regarding execution quality. By observing the venture group's advance in achieving these objectives, colleagues can reconsider the nature of the procedures important to contact them. A multifaceted input framework likewise indicates the zones needing change in the entire branch of industry and it gives open doors for setting benchmarks of consumer loyalty. Furthermore, a standard feedback framework might be viewed as more target than a contractual worker's own input study, since social cooperation segments don't exist in the standard framework. [5]

## B. CRM Approach

Customer Relationship Management (CRM) is a system for dealing with an organization's connections and interaction with clients and potential customers. A CRM framework encourages an organization to keep in touch with clients and it could improve their profitability too.

In construction, the clients and customers might be from large scope of private and public organization. For instances, government sectors, private partnership, contractor workers, consultants and authorize dealers. Basically, customers in this industry will be exceptionally intricate during the purchasing process and their request tends to increase drastically as their knowledge about construction may be extremely modern or advanced.

The expectation and needs will change after some time whether customers are coming from private or public sectors. The main concerns of customers usually will be on the sustainability and the impact of their business on the economics. Besides, they also tend to worry more on the social and ecological existence of the societies in which they work. Notwithstanding developing requests for more prominent responsibility, better administration and social obligation, there is expanded enthusiasm for the activities of developers by general society. More successful administration of more extensive scope of partnerships has been introduced for better improvements.

In construction, customers might be the owner or planned proprietor of private and public assets which can go from housing and properties to expensive scale infrastructure such as airports, highways and mass transit. It is very important to sort public and private clients accordingly for CRM to oversee and manage their attributes along the project life cycle. The qualities are distinctive as of their strategies and policies. For instance, public customer focuses on public responsibility while private clients mean to expand their profits.

Due to traditional practices and strategies, construction industry has experience awful reputation and failed the industry's customer. The notoriety for postponed projects, low quality of workmanship, cost overwhelms, awful security and environmental execution has prompted certain activities to change the industry area from top down.

CRM as a set of strategy tool could bring better change in the construction firm. A secured relationship between customer and vendor could improvise the project performance significantly. CRM method could be helpful in handling situation as to improve the relationships with clients. The most important key is to retain the existing customer who makes continuous purchases of construction services and products in order to increase the product performance.

If the CRM technology is executed well, it may improve the data collection and could analysis on critical customer relationship which could be beneficial in both strategic and project level decision making. Moreover, with the help of social media such as LinkedIn, Amazon and Yelp it helps other potential customers to get to know better on the experiences and reviews from current clients with the vendor's services and products. This could gain the trust for the clients and make the right decision to purchase the products. Although this strategy will be more useful in large scale markets, the influence of social media in the business to business and construction industry should not be exaggerated. Exchange of information between clients and vendors could somehow improve the product quality based on the current demands. Therefore, this could be a strategic way to attract more clients and maintain the relationship with the current customers. CRM system could assist in better communication with clients and information such as complaints and also the future developments for the products.

Furthermore, in most of project planning the organization will face difficulty to improvise in next job. They need to focus on the development and offer their clients with new designs, operations and facilities. By utilizing CRM technologies, it could help the organizations with the data they required in order to improvise their services in construction firm with the needs of customers.

A few obstructions to viable usage of CRM may incorporate the accompanying as huge amounts

of complex information on customers and relationship could be hard to oversee by not well-prepared clients. However, if there is lack of senior administration sponsorship and dynamic commitment in CRM it is probably not going to be fruitful. Furthermore, customers and stockholders should be persuaded of the advantages of actualizing CRM. Besides, CRM technology may just be incompletely implemented because of administrators choosing those systems that may give off an impression of being less demanding to work and so on. It means poor ease of use might be one of the greatest difficulties utilizing CRM tool in construction industry [6].

#### IV. CUSTOMER SATISFACTION

The future financial success of an organization can be achieved with good consumer satisfaction. Usually, to record on the quality of products and services, organization uses customer satisfaction as a tool. Likewise, it is ordinary utilized as a piece of work force reward system. Moreover, consumer satisfaction additionally influences the future money flow, improves profits and builds benefits; in this way also have strategic implications. Client satisfaction has picked up a huge measure of intrigue especially in purchaser advertising, and its logical establishment is somewhat very much archived, in spite of the fact that there are shifting feelings on, e.g. the part of desires in consumer loyalty. Client satisfaction has increase interest especially in purchaser advertising and the variation of opinions is well documented.

High client loyalty, future purchases, and positive verbal communication are the advantages of consumer satisfaction. Loyal customers tend to use the company's services and make purchases often from the same provider. Moreover, building up the hover of clients additionally makes a reason for consistent income for an organization. It also could somehow improvise the product quality based on the customer reviews on the product performance.

In a simpler word, customer satisfaction refers to the satisfaction or dissatisfaction of a customer towards a service by an organization. The client usually shares their experience related to certain events. This occurs when there is strong relationship between customer and organization. Sometimes, clients might be dissatisfied with few services by the construction company, but they would still be happy with the operations of whole operations.

Construction Company uses various forms to approach customer satisfaction to manage and evaluate on their service in order to improvise customer relationship. Additional benefits by measuring customer satisfaction are such as strong communication level between clients and organization while enable mutual understanding, get to know the demand for improvement for the product, monitor the progress to reach end goal and also reporting the results and changes obtain.

It could be said that quality and customer satisfaction are basically synonyms. To support on that statement, usually customer needs experience and remarks on a service to express their satisfaction level while quality can only be improved if there are reviews and comments from the clients. Moreover, customer satisfaction usually done based on the value of benefits while quality is not dependent on the price or benefit of a product. Furthermore, customer satisfaction is for potential improvement of the quality in the future. Besides, quality is seen as a precedent of customer satisfaction. In a nutshell, poor quality could be caused by weak customer relationship between client and Construction Company. Quality that doesn't meet customer expectation could affect the customer satisfaction and decrease future consumer or clients. For instances, in project production of a construction field with the negative issue such as scheduling problem and errors could appear to reduce potential customer hence the project could be failure as there won't be proper comments from the clients for future improvement [7].

#### A. Factors

In construction industry, client satisfaction is how a contractor able to satisfy clients expectations. This paper discussed contractor factors influencing client satisfaction, and their performance in Jordanian construction sector due to its immense growth which contributes to Jordanian economy in 2015. The study proposed six factors influencing customer's selection of the contractor which are a contractor or customer relationship, safety, project management, cost, prepared or skilled workforce, and general satisfaction.

In this paper, two important questions were evolved, first was factors clients trust as the most important when dealing with the contractor and second is the performance of the contractor organizations. They used face-to-face interviews with randomly six large class Jordanian client experts. This interview indicated that there are several factors contractors need to improve efficiently, namely personnel skills, service quality, budget, communication skills, safety performance, adherence to schedule, and management capabilities.

Cost performance is significant for a client to complete a project within the budget costs. This is because the cost needs to be prepared for any project, so they can spend money wisely. One of the most important discussions on this topic is safety considerations as a major aspect of any construction project. This could only possible to happen if all the policies, rules, and regulations of local laws followed and adopted.

Another considerable factor by clients is construction time or project construction duration which depends on the commitment of the contractors to the schedule. This can be measured by comparing planned and actual duration of the project. Failure of following planned schedule usually caused by delays, lack of human capital, and lack of qualification and

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experienced. Based on the rustles of the interview, good communications between a contractor and clients is one of the most important dimensions for them as a client. This communication plays a vital role to informed clients in an understandable and simple language and listening to they want and have to say. This demanded the contractor adjust the level of sophistication and professionalism with a customer. Adhering to management capabilities involves workforce, plant management, coordination of subcontractors, material management, and proactive attitudes towards problems.

All of the mentioned factors influence the quality of services and product which highly lead to unsatisfactory of clients. To achieve the excellence of the company, the organizations have to communicate well, support with full commitments, motivate staffs, and use all the knowledge and experience for their own advantages and client's satisfaction. This way, contractors could handle the project properly [8]

## B. Clients Challenges

This article discussed the challenges and the importance of a sustainable approach to urban development to build environment sector. The purpose of this paper is to carry out in dialogue with construction clients and other key stakeholders. They did the clients survey (questionnaire and face-to-face interview), investigated the national and international examples, and developed an explanation of new models. To sustain the construction environment, a client is playing the important capacity to act in these parties other than professionals, politicians, and stakeholders to transform the needs for design, planning, and production. Over the last decades, client's role has become a strong challenge with respect to their different roles and capability of the construction process.

A client as an influential co-creator of the construction responsible for reading and translating the core activities aim to create the best working environments during the construction (buildings and premises). This includes working conditions design in accordance with urban technologies and the organizations' environments at the strategic, tactical, and operational level. Based on studies and construction clients' experiences in the early stages, the projects performed depth analysis of clients' decision-making process which makes up the output effects of a building project.

Three studies were carried out which the first of them was a study on how construction's clients are carried out in different companies. The focus is on the practical implementation of construction, company's goal achievement, business or organizational goal related to premises project goals and the attitude of company management to premises planning issues. All of these focuses are done with respect to ecological, social sustainability, and financial.

Second study namely the study on the function of the construction client to the industry with respects to the operation's requirements including national and international examples. This is to achieve the mission of the core operations.

The third study is the early stage of study which maps and analysis methods to be identified. In this study, the client's role in the core operations as an advisor has been determined. In addition, this study highlighted the requirements for construction clients' function, level of knowledge and how to do the construction planning. It can be stated that clients' power is important as much as they can exert pressure and influence change of attitudes, and procedures to achieve sustainability and in facing future challenges in the construction industry [9].

#### V. CONCLUSIONS

As a conclusion, a company should know and understand what is important of customer feedback and what their roles in business are. Their opinions, thoughts and experiences are needed to provide helpful information to make the business fits the needs of customers correctly and to improve customer experience. Therefore, customer relationship management (CRM) in construction field play a vital role to run a successful business. It is easier to run a business and render income if the relationships between both parties are good.

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