

# Impact of Customer Management System in Improving Customer Retention: Optimization of Negative Customer Feedback

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**Abstract**—Complaints today have the ability to retain customer loyalty using state of the art systems and strategies in customer relationship management to analyze and respond to a plethora of customer perception. The Majority of companies are not aware of the beneficiary utilization of customer complaints for the sake of quality improvements. Also, some companies have problems determining how resolution of complaints can be profitable. In this study, we will define the problems and ascertain the importance of customer management system on the companies. Furthermore, we will determine the impact of such a system on efficiency, confidence, profitability and customer complaints. Eventually, we will develop methods and address the issues. In this paper, we used an open-ended questionnaire and distributed that to 30 randomly chosen respondents which were the passengers in an airport. We also define three hypotheses for our study and we will validate each of them. Then using frequency, Chi-Square and quality control method we optimized the size of customers' negative feedback and improved the process of customer retention.

**Keywords**—Complaint, Complaint management system, Customer relationship management, Retention.

## I. INTRODUCTION

THERE is a growing recognition that negative customer feedback can be regarded as a strategic tool in companies. Furthermore, complaint management is often not considered as a profit centre asset [1]. Mostly, customer complaints are treated as a cost element, and are regarded as a potential source of advantage. This alone may place the company under continual pressure and causes declining revenues by reducing the activities. Customer service has strategic significance. Companies need to constantly increase the level of customer satisfaction and customer expectation, to maintain quality in a competitive market [1].

## II. CUSTOMER SERVICE

Customer service implies procedures and actions that make it easier for customers to accomplish their transactions and businesses with a company in a secure environment [2]. Above all, there has been a dramatic growth in customer

contact services, which is known as, personal communication pathways. e.g. face-to-face, mail, , phone and email that mainly effect the way a customer need to initiate his/her interaction with a company [2]. This immense growth of customer contact prepares opportunities for a company to exercise enthusiastic customer responsiveness. What is more, a company can simply use the customer contact to communicate their recognition and capability to fulfill, customers' requirements. Companies need to deal with bundles of negative customer feedback and with their own strategies turn them into positive opportunities by providing personalized customer contact services [2]. One of the most significant parts of supply chain management process is customer management service that illustrates how companies may face to their customers. The major goal of these services is to provide a sole source of customer information, like product accessibility [3]. Customer service outstandingly affects the performance of the company and absorbs lots of customers in the company. This service should have the ability to directly leverage purchasing decision and provide a competitive advantage in the work setting. Moreover, it can intensify the loyalty of the customers and tempting customers to repeat their purchases. What is more, a secure environment will be created for customers and employees [3].

### A. Defensive and offensive marketing strategy

Today, most acknowledged business companies employ offensive as well as defensive marketing strategies. The aim of the offense strategy is to create new clients; the objective of the defense is to keep current customers [4]. Defensive marketing have been become important while the cost of finding a new customer is high pertain to the cost of keeping a current customer. For instance, Volvo, which is one of Swedish automobile manufacturer, approximates that its cost of finding a new customer is three times as the cost of keeping a current customer [4].

## III. DEFINITION OF COMPLAINT

Complaints are the expression of dissatisfaction that is illustrated within companies with the goal of making the service or product provider acquainted of an attitude which is internally accomplished and experienced to have an adverse effects and making a change in the criticized behaviour [5]. Complaints can be created verbally or in written statement [5].

#### IV. COMPLAINT MANAGEMENT

Prior to turning to the analysis of complaints, we will define the meaning of complaint management. We can bring an instance with a very much alike meaning to complaint management by easily contrasting that to guarantees and warranties. A warranty is a restricted agreement or conditional guarantee which usually articulates that a service or product, if covered, will be brought to proper order at the cost of the provider [4].

Complaint management is a more general stipulating. Also those who have complaints may catch various rectification not particularly what this takes to lead the product back to first made condition [4]. It is necessary to pay attention that it permits companies to utilize complaint management for services and products, as well. Furthermore, an outstanding factor of complaint management is achievement to expedite articulation of complaints and expressing the opinions of customers [4].

The alteration of customer contacts into information for all customers and the managers are called complaint management.

##### A. Complaint management function

Data collection, data analysis and reciprocal communication of information can be considered as some of the roles of complaint management [6]. The ultimate objective of complaint management and complaint management system is to improve satisfaction of the each complainant. Moreover, this generates new expectations and assumptions and prevents further dissatisfaction between two parties [6]. Complaint management system produces an atmosphere for customers to freely claim to the company and give their feedbacks directly and without fear of being identified. Besides, the company will utilize complaints and benefit from them for further improvement.

##### B. Complaint management profitability

Complaint management profitability (CMP) shows the business-related effectiveness and productivity of the procedure of complaint management system [1]. CMP is calculated by connecting the invested financial assets to the advantage of complaint management. The advantage of complaint management is calculated by reducing its costs from its advantages. The invested financial assets balanced with the costs of complaint management actions within a extent of time [1]. To calculate CMP adequate data are mandatory. Besides, it must be argued that costs and benefits involved in this computation, ways of measuring the costs, various approaches must be measured to delineate the investment advantages [1]. Based on the costs of complaint management, different kinds can be recognized within complaint management. These are described as below:

1) Personnel costs create from human resources that are directly regarded with complaint management procedure, for example we have some employees for a complaint management department.

2) Administration costs *that are normally created by some costs for instance the cost of buying office equipment.*

3) Communication costs *are pertained with communication procedures to resolve the client's issues as an example the internet cost can be deemed as communication cost.*

4) Response costs *are raised in the framework of the problem solution [1].*

According to the benefits of complaint management, four clear kinds of CM can be recognized based on literature review [1].

- a) The *information benefit* illustrates the value that is created utilizing information from customer complaints to enhance products, increase effectiveness and decline failure costs.
- b) The *behavior advantage* assimilates the positive changes in behavior of the clients because of gained complaint gratification [1].
- c) The *repossession advantage* creates while complaining customer stays with a company rather than switching to other store.
- d) *Advantages of Communication* define the spoken impact of complaint management. They are created when complaints are resolved and gratified clients are involving in positive way, prescribing the company and patronize the grabbing new customers [1].

##### C. Advantages of having complaints in work-setting

Dissatisfied customers generate managers with an opportunity to understand about issues and take positive action to clarify that mistakes do not transpire. Customer complaining attitude has been recognized as a response initiated by customer complaint. Customer satisfaction or dissatisfaction is normally regarded as a personal assessment of the distance between expectations results, which negatively cause instability expectations conduct to dissatisfaction [7]. Acquiring information from mistakes was both are main elements of achieving legitimate, CRM, and profitability is unavoidable. If complaints are changed completely into knowledge about clients, they may produce an invaluable amount of capital for enterprises. To achieve this asset, companies must design, improve, operate and upgrade their systems for administering complaints [8].

#### D. Advantages of having complaints management system

Complaint management must be deemed the main segment of customer relationship management [5]. It has the capability to better shape the life cycle of customer relationship by terminating improper stages and replacing with maturity stage and revitalization stages. Having customer management system in the company we may give better service to our current and potential customers and gather our lost customers. Moreover, it can strengthen the process of customer retention and the company can simply regain management [5].

#### E. Customer retention process

Customer retention has been shown to be a primary goal in firms that practice relationship marketing [9]. Furthermore, 1% improvement in the customer retention rate intensifies and improves firm value by 5%. Moreover, 5% increase in customer retention increases a firm's profits at a range between 25% and 85% [10].

### V. CUSTOMER RELATIONSHIP MANAGEMENT

Customer relationship management is one of the most significant state of the art that makes the companies familiar with the customers and their behaviors. CRM is the comprehensive recognition of customers, their requirements and preferences [11]. Besides, it introduces broad scope of marketing process, sales process, service process and the planning for each of the procedures. Moreover, it provides an efficient cooperation between procedures as well [11]. CRM is a consolidation of technologies and business processes used to gratify the requirements of a customer during any given interaction. More specifically, CRM includes acquisition, analysis and utilization of knowledge about customers to sell more products or services and to do it more productively and efficiently [12].

CRM creates knowledge severity and procedure elaboration which each of them creates knowledge-centric business procedure and the transaction-centric procedures, accordingly [11]. CRM has the ability to changes marketing context and improves the internet technology. The company requires CRM to acquire more clients, and utilize its knowledge to sell more goods and services [13]. besides, CRM is a strategy to optimize the advantage and retain customers into various parts [14]. Furthermore, CRM is a customer-centric business strategy that consolidates sales, marketing and customer care service to produce and add some value for the firm and its customers. It may generate system for assessing customer relations and creates positive, assured and certain competition [15].

### VI. METHODOLOGY

We benefited from an open-ended questionnaire which was recently created to this research. It was disseminated to 30 accidentally chosen people in an airport. Before distributing the questionnaires we pilot tested the questionnaires. The survey questionnaires were given to respondents. Nearly, all respondents replied to the questions by fax or email. Then, using factor analysis and forecasting analysis, we analyzed the

questionnaires using Chi-Square for confidence of the customer to utilize the system and estimating the profitability of the firm. Moreover, we used quality control to find Upper control limit (UCL), average and lower control limit (LCL) of customer complaint. We used high, medium and low scale to analyze customer feedback and for customer complaint we used yes and no to find the respondents who complain or not. In the next part, we will analyze the variables that directly or indirectly influence in our process.

#### A. Hypotheses

- 1) Development of CRM and CMS have a direct and positive impact on Customer satisfaction
- 2) Control in CMS has a direct and positive effect on decreasing the level of complaint
- 3) Development of CRM and CMS have a direct and positive impact on quality and profitability of the services and products.

### VII. ANALYSIS AND RESULT

Based on our questionnaire, we gathered our customers' feedback and the optimum responds from our respondents. As shown in table 1, Complaint management system must work under the control of CRM system to be more productive. To do so, customers had various behaviors considering the question. According to the respondents' results, 100% of the respondents were agreeing upon the controlling variable and they illustrated that the CMS is absolutely controllable. What is more, CMS does have a great managerial outcome for the company as well as customer. Moreover, CMS intensify the quality of products and services and is totally user-friendly. Also, majority of people believe that this system can diminish the level of customer complaint.

Also, it produces convenience in which customers see a website and the company alone as simple, and intuitive as possible [16] Indicates that 30% of customers who leave a website without purchasing anything do so because they were unable to navigate their way through the site. Eventually, it may lead the company toward high profitability and save the time of the employees and customers simultaneously. In the next part, we are going to validate and ascertain our Hypotheses as we earlier mentioned that using CMS and CRM, we are going to decrease the level of complaint and save the time.

TABLE I ANSWER OF RESPONDENTS TO EACH OUTCOME OF THE RETENTION PROCESS

Feedback from customers	Number of Respondents: High, Medium, Low
Confidence	20, 5, 2
Avoid future problems	11, 4, 15
Save time	19, 1, 10
Profitability	16, 8, 6
Higher quality	24, 3, 3
Customer satisfaction	22, 2, 8
Customer benefit	20, 2, 8
Managerial	9, 20, 1

outcomes	
Efficient	17,1, 12
User-friendly	24, 2, 3
Control	30
Customer complaint	25, 5

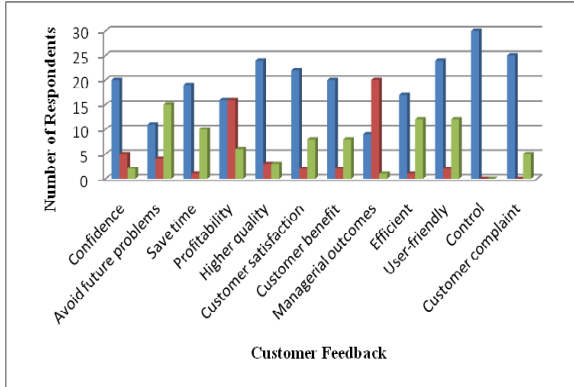


Fig. 1. Customer response regarding each variable

As shown in figure 1, we have three series of response based on above variables which is described in high, medium and low. Blue color illustrates the high or positive response from customer, green color outlines medium satisfaction and the red one shows the negative response or low feedback on behalf of the customers. Among all variable control has the main impact on customers and employees. Moreover, using CMS system, company can easily decrease the customer complaint and the system and the company become more user friendly. Furthermore, customer may take benefit from new advantages from company. What is more, having this system company encounters profitability and may prevent future issues and this alone can lead the company through efficiency and some important managerial outcomes. On the other hand, customer will become more satisfied and it save customers' times as well and they have more tendency and confidence to repeat their purchase using the system.

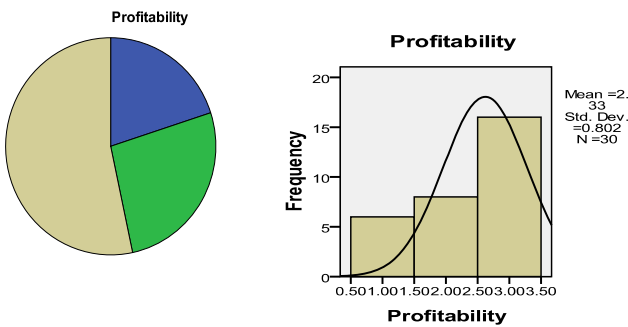


Fig. 2 (P. Pie Chart) and 3 (P. Diagram). Profitability of the company based on customers' feedback

Fig. 2 shows the profitability of the company. As shown in the figure the figure had separated in three parts that has already shown in above table. Using the CMS system will bring about high profitability to the customers and to the

company. Figure 4 show the profitability willingness of the system with their Mean and standard deviation which has a positive and normal trend. Below, shown how the system are efficient and can save the time for the customers and the company.

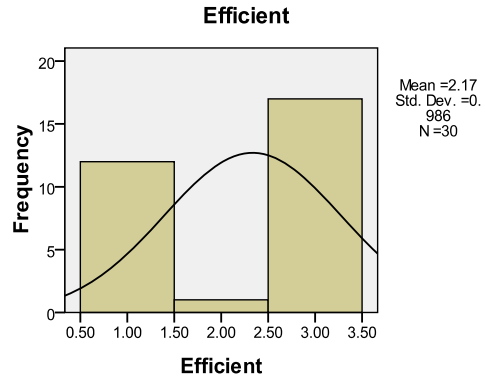


Fig. 4. Efficiency of the CMS system based on customers feedback

TEST STATISTICS

	confidence	Profitability	Customer satisfaction
Chi-Square	15.000 <sup>a</sup>	5.600 <sup>a</sup>	9.143 <sup>b</sup>
df	2	2	1
Asymp. Sig.	.001	.061	.002

a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 10.0.

CONTROL \* CUSTOMER COMPLAINT CROSS TABULATION

		Customer complaint		Total
		yes	no	
Control	high	5	25	30
Total		5	25	30

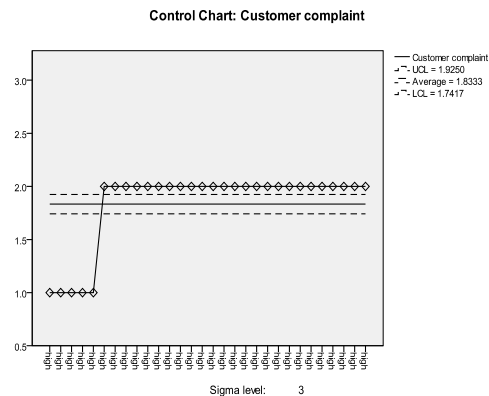


Fig. 5 Quality control chart

Based on fig. 5, CMS under the supervision of CRM system has a major effect on controlling all aspects of a business and its transaction. Moreover, it has a big impact on

the customers and employees. As shown in the figure 6 and based on Pareto's law, the control of the system used to be leveled, however, after implementing the CMS system, it has a dramatic increase. Below, customer complaint after implementation of the system has been measured and the level of customer satisfaction is very high in comparison with before.

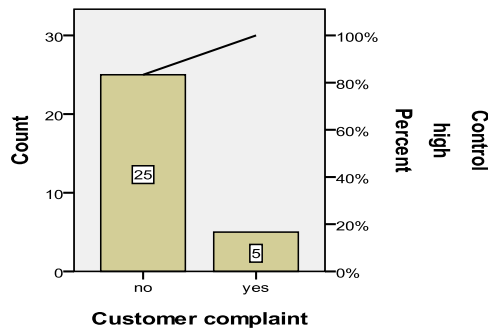


Fig. 6. Customer complaint and Control Based on Pareto's law

### VIII. CONCLUSION

Companies are dealing with massive customer feedbacks on daily based which could be positive, negative or neutral. They must utilize all sort of feedback in order to increase and improve their own perceptions. However, most of the companies today, lack good complaint management department and complaint management system. In this paper, using our data from an airport, we selected a population and worked on their behaviours to identify their feedback regarding having a complaint management system and its advantages.

Prior to that we defined three hypotheses and in the end we were manage to validate all three hypotheses. Majority of the respondents believe that complaint management system has a broad control over customers, their complaint and employees of the company. Moreover, this system under the monitoring of CRM can decrease the level of negative feedbacks on behalf of customers. Besides, it is efficient, save the time of both parties and has some managerial and customers benefits. Eventually, the system is absolutely profitable for company which was the main factor for manager to implement that.

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