

# Online Complaint Process in Customer Relationship Management

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## Abstract

Nowadays Customer relationship management is very important for doing the any type of business. CRM is a term that refers to practices, strategies and technologies that companies use to manage and analyze customer interactions and data throughout the customer lifecycle, with the goal of improving business relationships with customers. Therefore, enterprises have spent enormous efforts on professionalizing their customer relationship management. Complaint management holds a key position in CRM, since it helps restoring customer satisfaction and repurchases intentions. A complaint is dissatisfaction makes in relation. The aim is a relationship of trust between the seller and customer that leads to loyal behavior and to commitment in the sense of an inner bond and it is based on positive experience. The objective of the complaints management system is to make complaints easier to coordinate, monitor, track and resolve, and to provide company with an effective tool to identify and target problem areas, monitor complaints handling performance and make business improvements. It is implemented using ASP.Net, a well-established method for business process reengineering (BPR). Complaints management software is used to record resolve and respond to customer complaints, requests as well as facilitate.

## **I. INTRODUCTION**

A complaint system is a set of procedures used in organizations to address complaints and resolve disputes. There is also a major need to collect, review and understand the nature of conflict management and complaint systems around the world. Studies and citations are needed about how complaint systems work for women as well as men. Research is needed as to how systems work for many different national groups, for people of different socio-economic classes, and different ages, and different religions, and especially for contract workers and immigrant workers, in every country. Studies (and citations) are needed about complaint systems in health care, in faith-based organizations, in schools, in political organizations, in the military and in many specialized occupations. Studies are needed about important specialized issues like free speech. A number of Artificial Intelligence technologies are helpful in complaint resolution process, understanding the attitudes of involved parties and reasoning about them, in particular, based on Belief–desire–intention model. Concept learning is an adequate formalism to reason about complaints.

## **II. SURVEY REVIEW**

- In the existing system the people must go to the office for any kind of help. The users can post their problems but cannot get the details of the problems and some other services. This system doesn't have much popularity and is not user friendly. In general, several suggestions on the design of complaint management processes can be found in literature. For example, the 8D-method was developed by the automotive industry, which is an eight step procedure for handling complaints (Behrens et al., 2007).
- Kaulbars and Nunn (2012) introduce a complaint management process for the cruise industry. Effey and Schmitt (2012) review existing complaint procedures (e.g., 8D-method) and derive a three-step approach for complaint handling. However, these approaches either underlie a branch-specific imprint, or only give very abstract descriptions of complaint handling procedures as they claim general validity (Krishna et al., 2011).
- Further, it needs to be taken into account that the implementation of a professional customer complaint management is a challenging task since enterprise-specific properties (e.g., customer type, branch) need to be considered carefully. Whereas the design of business processes has been a subject of business process management (BPM) research for a long time, detailed guidelines on how to particularly implement a complaint management process are missing.
- The concept of an integrated conflict management system was conceived and developed by Mary Rowe, in numerous articles in the 1980s and 1990s. She saw the need to offer options for complainants and therefore a linked system of choices within an organizational system.

- The idea of a systems approach has endured well. In recent years however, there has been discussion as to whether conflict should be "managed" by the organization or whether the goal is to understand, deal with and learn from conflict. There is also concern about practical and theoretical issues in "integrating" a system, with some observers preferring the idea of "coordinating" a conflict system. However 2012 research by David Lipsky et al., suggests that an increasing number of corporations see themselves as having "integrated conflict management systems," or "ICMS."

### III. PROPOSED SYSTEM STRUCTURE

The process begin when receive a complaint relating to a service or product. As per customer processing customer can call or Email or SMS to the service centre and create a reference object at item level for the product or service about which the complaint was made, reference object such as Product ID, Complaint ID installed bases with components, object or serial numbers.

Management recognized this way of handling complaints as incompatible with the newly defined quality goals. Hence, the establishment of a professional complaint management system was a central project in the company's realignment and reorganization efforts. For that purpose, characteristics of the company needed to be considered: first, the company served corporate customers only. Contract negotiations and conclusions were usually conducted in face-to-face meetings. Therefore, complaints were often uttered to the company's account managers or sales employees directly.

Second, the company's customers could be characterized as "conservative customers" preferring traditional channels to communicate with the customer service.

Hence, there were no plans to use Web 2.0 technologies for immediate complaint Handling. Third, the customers expected services and products to be adapted to their individual needs. Thus, each complaint had to be properly analyzed and customer specific solutions needed to be worked out.

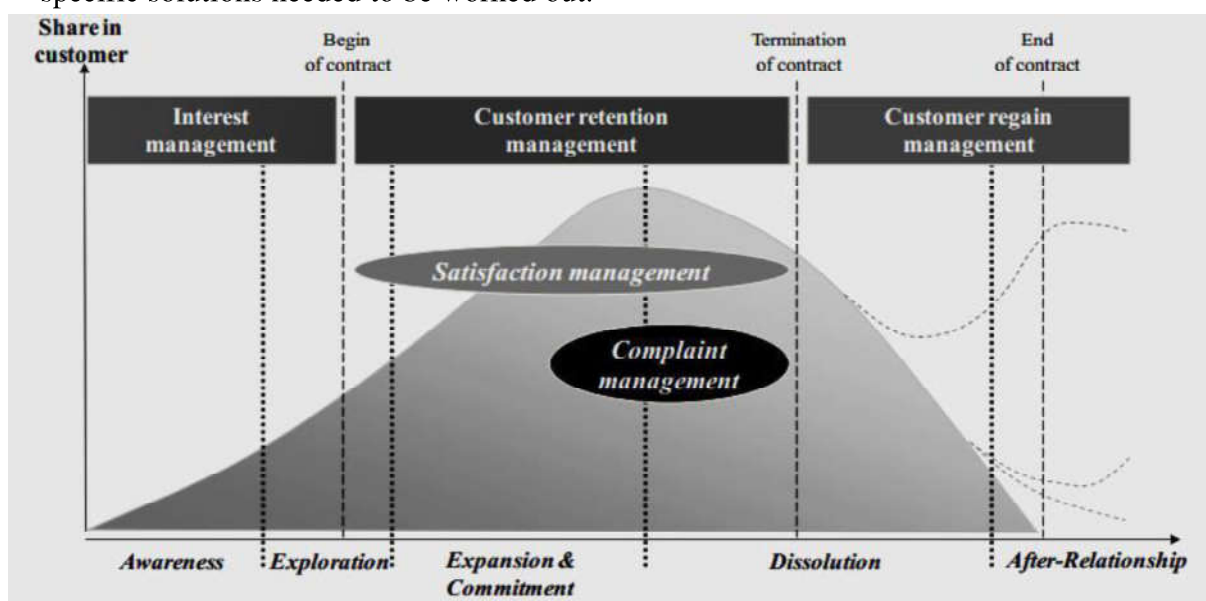


Figure 1: Example of Customer life cycle

#### IV. HARDWARE AND SOFTWARE REQUIREMENTS

- **Hardware Requirements**  
Pentium processor: Pentium IV or onwards  
RAM Capacity: 256MB  
Hard Disk: 80GB
- **Software Requirements**  
Operating System: Windows XP  
Software Package: ASP.Net  
Database: Microsoft SQL Server 2005

#### V. IMPLEMENTATION DETAILS

##### 5.1 Product Catalogue:

Complaint integration with the back office ensures that exactly what product the customer has ordered or purchased thereby simplifying and speeding up the support process.

##### 5.2 Employee:

###### 1. *Register\create complaint*

- The system offers you the items contained in the processing transaction so that user can decide which items you want to copy into complaint.
- With reference to more than Customer Relationship Management invoice.
- If not, then register new complaint.
- User takes more details about complaint from customer.

###### 2. *Maintain reference object or serial number information such as Complaint ID*

Researcher created a reference object at item level for the product or service about which the complaint was made. Reference objects can be products, installed bases with their components, objects, or serial numbers. User or Employee can either an installed base components, an objects, or a product with the corresponding serial number. Depending on the settings for serial number validation in the Equipment Serial number, the system validates the serial number that researcher entered and determines the corresponding object.

Users also check details of subpart with the corresponding Serial Number. Depending on the setting for serial validation in the Subpart Serial Number, the system validates the serial number that research entered and determines the corresponding object.

###### 3. *Maintain items*

Enter more details of complaint and the complaint quantity in the product and by analyzing complaint, decide Complaint Type according to that assign Engineer by analysing work done status of Engineer and if Engineer is already present in that area then send SMS to engineer and complete details of complaint and customer such as Area code, type of complaint. If not then prepare schedule of that Engineer to specific complaint.

###### 4. *Categorize issues (CRM)*



Researcher uses the predefined value in categorization to enter information such as the reason for the complaint. This information is then available to be used in analyses.

**5. *System determines valid warranty and service contract (CRM)***

The system performs an automatic warranty check such as whether the product and subpart is in AMC, Out Of Warranty and Warranty.

If a warranty is determined, this is apparent from the assigned warranty product then relevant services and service parts and their related discounts are defined in the warranty. The internal recipients to whom the incurred costs should be charged are also defined in the warranty. The system determines the existing services contract for the business partner for each complaint item.

**6. *System or investigator approves item and display approved quantity (CRM)***

The product is approved either by the automatic execution or by terms and condition of that product or by warranty status. In response to the complaint, system triggers one or more of the following actions for each complaint product.

**7. *Create credit memo request (CRM)***

If in warranty period – After providing service create invoice to customer according to warranty status and terms and Condition Company for a customer within the context of a complaint.

If not in warranty period – If product is not in warranty period then employee can also create a debit memo request to calculate additional customer charges within the context of a substitute delivery for example, for a replacement product with a higher value than the original product .The credit memo request\debit memo appears in the billing or invoice due to list in CRM billing or invoice.

Generate the billing documents based on this billing due to list in CRM billing or invoice. Generate the billing documents based on this billing due list.

**8. *Create returns request (CRM)***

Take feedback from Customer after service is provided or invoice is paid.

**9. *Release and save complaint (CRM)***

Research the complaint and then save it.

## **VI. OBJECTIVES**

The objective of the complaints management system is

1. To make complaints easier to coordinate, monitor, track and resolve.
2. To provide company with an effective tool to identify and target problem areas, monitor complaints handling performance.
3. To make business improvements.
4. Prompt and specific retrieval of data.
5. Flexibility in the system according to the changing environment.
6. Controlling redundancy in storing the same data multiple times.

7. Accuracy, timeliness and comprehensiveness of the system output.
8. Stability and operability by people of average intelligence.
9. Enhancement in the completion of work within the constraints of time.

## VII. STRUCUTRE OF BPR

The PROMET BPR procedure model comprises the three phases “preliminary study”, “macro-design” and “micro-design”. The approach can be flexibly adapted to users’ needs. Thus, certain phases and activities of the procedure model may be omitted without experiencing adverse effects on project goal achievement.



Figure 2: Structural of Business process reengineering

## VIII. TEST ANALYSIS

Testing of the system can be carried out by checking the response of the random complaints. It gives the excellent response. Its performance is better than the previously existing systems.

Following graph shows the Woking analysis.

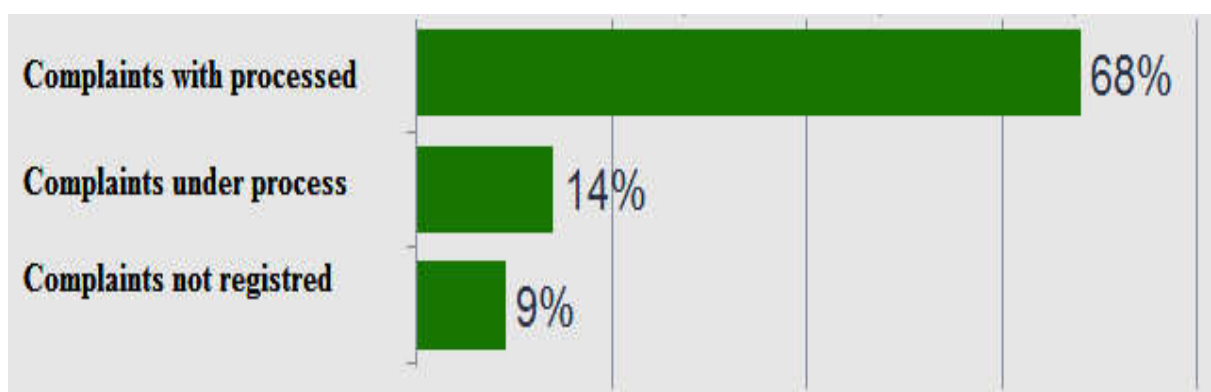


Figure 3: Working analysis

## IX. CONCLUSION

The implemented system has been computed successfully and was also tested successfully by taking “test cases”. It normalizes the system to load database and to register the complaints within one minute. It is user friendly, and has required options, which can be utilized by the user to perform the desired operations. Application software meets the information requirements specified to a great extent. The system has been designed keeping in view the present and future requirements in mind and made very flexible. The goals that are achieved by the software are Instant access, improved productivity, Optimum utilization of resources, efficient management of records, Simplification of the operations, less processing time.

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