IMPROVING RELATIONSHIP WITH CUSTOMERS BY REDUCING COMPLAINTS - USING MODELLING AND PARETO DIAGRAM

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Abstract. Today, marketing specialists consider that we are in an era of relational marketing. In this new era, where the environment is influenced by globalization, overcapacity of production and the latest by personalized products/ services, the focus is not on increasing production, but increasing profit by improving the relationship with profitable customers. Customers are of all kinds, they all want to get value and solutions to their problems; that is, these people are oriented towards achieving rational goals. In this context, in the present study we shall focus on improving the relationship with customers by reducing the number of customer complaints using simulation and marketing modelling: the Pareto diagram. This diagram is used to control the quality of the services and products offered, and the purpose of our research is to focus on implementing this chart to determine the problems that have arisen and to develop a plan to help reducing problems and finding viable solutions for obtaining reciprocal relationships and long-term benefits.
Keywords: customer relationship, customers' complaints, modelling, Pareto diagram, value.
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1. Introduction

Organizations act in a turbulent environment that offers competitive advantages to companies for which they should fight continuously and strategically with fierce competition in order to achieve performance and attract, maintain and grow existing and potential customers.

We live in the relationship age, and the relationship with customers is a special one, based on knowing their needs. Thus, customer relationship management plays an important role in the success of any business. Good CRM practices involve all the functions of the organization and should be driven by top management. But the success of CRM is not achieved overnight nor is it an easy task (Knox et al., 2007, p.14). The customer is the subject of all marketing activities (Kumar and Reinartz, 2012, p.3).

2. About relational marketing

Philip Kotler proposes a new approach to organizational performance, based on the concept of relationship (Kotler, 1999). He affirmed the importance of developing stronger stakeholder relationships in the organization's environment. This highlights the need to move from a short-term, transactional marketing perspective to a long-term vision based on relational marketing in order to increase the competitiveness of organizations in local markets and the global market. O'Malley L.O. and Tynan C. affirms that relational marketing is perceived as a tie between partners as a marital partnership characterized by trust, commitment, communication and sharing resulting from the mutual fulfillment of the objectives (Baran R.J. et al., 2008, p.110). Relationships involve at least two parts that must be in contact with one another (Gummesson, 2012, p.3). Relational marketing is often presented as the opposite of transactional marketing; in the transaction, no matter how many purchases are made from a vendor, no relationship is created. Thus, emotions and feelings are not created based on experience.

To better understand the role and importance of relational marketing, we will analyze it by comparing it with transactional marketing based on some specific features (Table no. 1).

Table no. 1. Differences between transactional marketing and relational marketing

Characteristics	Transactional Marketing	Relational Marketing
Analysis horizon	Short term	Long term
Marketing activities	Accent on products and services	Accent on rezults and clients
Key-concepts	4P, segmentation, branding-ul	Interaction, relationships and used networks
Promotion strategy	Accent on non-personal promotion	Accent on personal interaction
Objective	Sales	Customer loyalty
Services	Low concentration	High concentration
Commitment to customers	Low	High
Quality	Care of the production function	Everyone's care
Object	Sole tranzactioning	Networking
Perspective	Static	Dinamic-evolutive
Centering	Decisions pre-sales	Decisions post-sales
Dependency	Low	High
Quality dominates to	Results	Interaction
Importance of the employees in the organisational succes	Low	High
Production concentrates on	Mass production	Mass personalization
Commitment	Competitive	High of the customers
Communication	Persuasive	Usual
Strategy	Of getting new customers	Of mentaing new customers
Concentration of the transaction	Of type one to many	One to one
Marketing mix	Based on the 4P	On the 7P and on the 4C
Marketing orientated on	Product	Customer
Concentration on	Price	Value

Source: adapted after Bruhn M., 2003, p.13; Rao K., 2004, p.257; Hennig-Thurau T., Hansen U., 2013, p.5; BPP Learning Media, 2015, p.409; Chadwick S. et al., 2015, p.209; Biswas S., 2014, p.11; Suphan N., 2015, p.32.

2. The benefits of the customers' relationship

The benefits resulting from the client-company relationship are leading to increased customer loyalty (Peppers and Rogers, 2004, p.20):

- The client learns more about their own preferences from each experience and feedback from the firm so that they are able to buy and handle some aspects of their life more efficiently,

- The company learns more about its own strengths and weaknesses from each interaction and customer feedback, and so will be able to sell, communicate and deal with some aspects of its own tactics or strategies more effectively.

Cultivating these learning-based relationships depends on the company's ability to efficiently manage the information received from and about customers. Customers, be they natural or legal, do not want more choices, but simply want to get what they seek or want. Technology now makes this possible, including databases that allow a large amount of data

to be collected about their needs and their use in personalizing products and services for each client. Not all customers are equal, so businesses need to focus not on sales transactions but on equity.

Organizations need to know which customer relationships to focus on and decide to maintain. Products and services need to be personalized according to their needs and desires, and customers should feel proud because they are created and modeled according to their wishes. The more they collaborate, the customers will not want to leave the company. Thus, relationships form a affection, an attachment to the firm, a trust-based collaboration, a value-based relationship, from which the firm can gain competitive advantage, over its competitors.

Recognizing that customers are co-producers for the firm, they should personalize their offer and strive to maximize their involvement in the production process by knowing their needs and desires. The result is customer engagement in relational exchange and gaining benefits for both parties (Kleinatenkamp, 2006):

- the belief that the partner is trustworthy, basic, competent offers quality,
- the partnership offers value,
- the customer experience is an efficient one in terms of cost,
- the relationship offers minimal risks,
- the exchange is based on moral obligations,
- the exchange is based on personalization, leading to a high level of satisfaction of needs, desires, tastes and preferences.

Both parties involved in the relationship can benefit from customer retention; it is not only in the company's interest to build and maintain loyal customers, but also to customers benefit from a long-term relationship. The benefits of the two parties show that they will have won their customers if they remain loyal to the company and will receive a higher value than that received from other competitors; the value being an exchange between what they offer and what they receive. Customers remain in a relationship when the value of what they receive (quality, satisfaction and other specific benefits) exceeds the amount they offer (monetary costs - amounts spent and non-monetary, such as date and information about their purchasing behaviour, brands bought, desires and needs, preferences, tastes).

When the company provides what customers value, the client will be rewarded and then loyal. The benefits offered to loyal clients are numerous and directly related to the specialists who come in direct contact with them, and some drawbacks for both sides are described in this relation (Table no. 2).

Table no. 2. Advantages and disadvantages resulting from the company's relationship with customers

Relationship Advantages	
For the firm / company	**For the customers**
Higher purchased quantities	Social benefits
Lower costs	Trust
Clients detained on TL	Special treatment
Increased profits	Reduced risks
Lesser deficiencies	Increased value
Free advertising made directly by customers	Customized services
	Increased satisfaction
	High interaction with the company

Relationship Disadvantages	
For the firm / company	**For the customers**
Whenever a customer makes a transaction, it does not necessarily indicate that a customer is CRM loyal, in addition to its benefits, can also bring costs (it is said that between 30-50% of the implemented CRM programs fail and between 60-80% of them do not achieve their goals) One of the limits of the CRM is too high concentration on means (IT tools) and too little on the final link (customer).	The customers may not want a relationship with companies, so companies will lose financial and energy resources needed to build such a relationship

Source: Hudson and Hudson, 2013; Klopper et al., 2006, p.319.

3. The customer complaints – a source to improve the relationship between organization and customer

The customers' complaints are another valuable way of communicating with customers and finding out what they want. The customers' complaints should not be seen as something that hurts the organization, but as something that will do well in the future for the specialists and the organization itself.

Thus, these complaints (Peppers and Rogers, 2004, p.185):

- provide an opportunity to connect with customers and to find out the problems that affect the efficiency of the relationship; so the company can determine ways to regulate the situation, straighten the relationship,
- allow the organization to expand its knowledge and understanding the customer wishes; it can learn more about clients, know their needs and increase their customers' value and usefulness for them,
- provide clear and honest information on the products / services offered, by listening to complaints, understanding the behavior, changing the offer, and providing feedback.

So even if the company gets a negative feedback, you have to think that a complaining customer actually offers a gift (a present). The information we receive from complaints / reclamations by the firm can improve and increase performance. To improve these problems from organizations, specialists may use different mathematical models who may help to observe them before they appear (Florea, 2014, p.43), to measure their impact or their evolution in time, such as: stochastic function (Florea and Mihai, 2014, p.312), regression function (Florea and Mihai, 2015, p.231; Stegaroiu and Florea, 2013, p.226), Markov chains (Florea, Mihai and Duica, 2017, p.749; Florea, 2017, p.68), or Pareto diagram, which will be used in our research. The customer complaints provide the opportunity to find out what issues exist, how we can help our clients, and how we encourage them to return and use the company's products and services. When organizations listen to their customers in an open and more flexible way, they can gain new experiences from complaints received. Unfortunately, most people who hear complaints block them psychologically. Other clients do not even complain, they just go to other companies without giving them valuable information about improving their business.

4. Research methodology

To improve the relationship with the people, to provide them with satisfaction and the long-term value, the organization must communicate with the clients using the dialogue (Duic and Florea, 2017, p.49) to objectively and with great attention to the causes of the

dissatisfaction and provide viable solutions. One of the main causes is customer complaints and reclamations, and one of the solutions underlying the improvement of relationship is to determine the problems and minimize the number of complaints about customer dissatisfaction.

An unsatisfied, unhappy customer becomes a fragile client, open to the competition's news and offers. And because they are more and more demanding and frequently expressing their dissatisfaction and not hesitate to discuss this with other clients, they want to be listened, understood and respected, waiting for not a response, but a solution to the problems presented.

One of the methods that help to know and implicitly reduce the number of complaints is the Pareto diagram. *This* is a graphical method used in the decision-making process, which aims to prioritize decisional priorities based on the premise that 20% of the variables of a phenomenon generate 80% of the effects (Duic, 2009, p.159).

Case study - Improving customer relationships by reducing customer complaints / complaints using the Pareto diagram

A chain of stores offering electronics and home electronics products and services wants to improve their relationship with customers and increase their satisfaction. To achieve this goal, the number and typology of complaints received from customers using their products and services is analysed. The company receives on average 490 monthly complaints (Table no. 3). It seeks to improve relationships with its customers and search for solutions to minimize complaints. The Pareto chart is developed to determine the type of complaints and their importance.

Pareto diagram deployment steps:

Step 1- Collecting data on complaints typology

Step 2- Preparing the data. Complete the table for ordering complaints in descending order and calculate the cumulative relative frequencies for each type of complaint.

Step 3- Making the Pareto diagram (according to both ways).

Step 4- Interpretation of the results. In order to solve 80% of customer complaints, it is sufficient to eliminate 20% of the reasons for their dissatisfaction. Therefore, it is necessary to develop a plan of measures to improve patient satisfaction.

Step 1 Collecting data - the number of complaints is placed in a table, in the order of the categories of complaints determined and their total number is calculated for further processing (Table 3).

Table no. 3. Colectting data for analysis

No.	Category	Number of complaints
1	Problem solving time	143
2	Staff attitude and behavior	35
3	Price	52
4	Customer information, communication	123
5	Quality of products and services offered	65
6	Work program	27
7	Purchase experience	38
8	Other problems	7
	Problems Total	490

Step 2 Preparing the data - placing the complaints in order of their importance, thus determining absolute frequency, cumulative absolute frequency, relative frequency and cumulative relative frequency, until it reaches 100 (Table no. 4).

Table no. 4. Preparing the data

No. of complaints	Category	Absolute Frecvency	Absolute cumulative frequency	Relative Frecvency	Relative cumulative frequency (%)
1	Problem solving time	143	143	29,2%	29,2
4	Customer information, communication	123	266	25,1%	54,3
5	Quality of products and services offered	65	331	13,3%	67,6
3	Price	52	383	10,6%	78,2
7	Purchase experience	38	421	7,8%	86
2	Staff attitude and behavior	35	456	7,1%	93,1
6	Work program	27	483	5,5%	98,6
8	Other problems	7	490	1,4%	100
	Total	490		100	

Step 3 - Pareto Diagram - the first form of the Pareto diagram (the two types of bar graphs) is made in descending order of the absolute frequency and in ascending order of the absolute cumulative frequency (Figure no. 1).
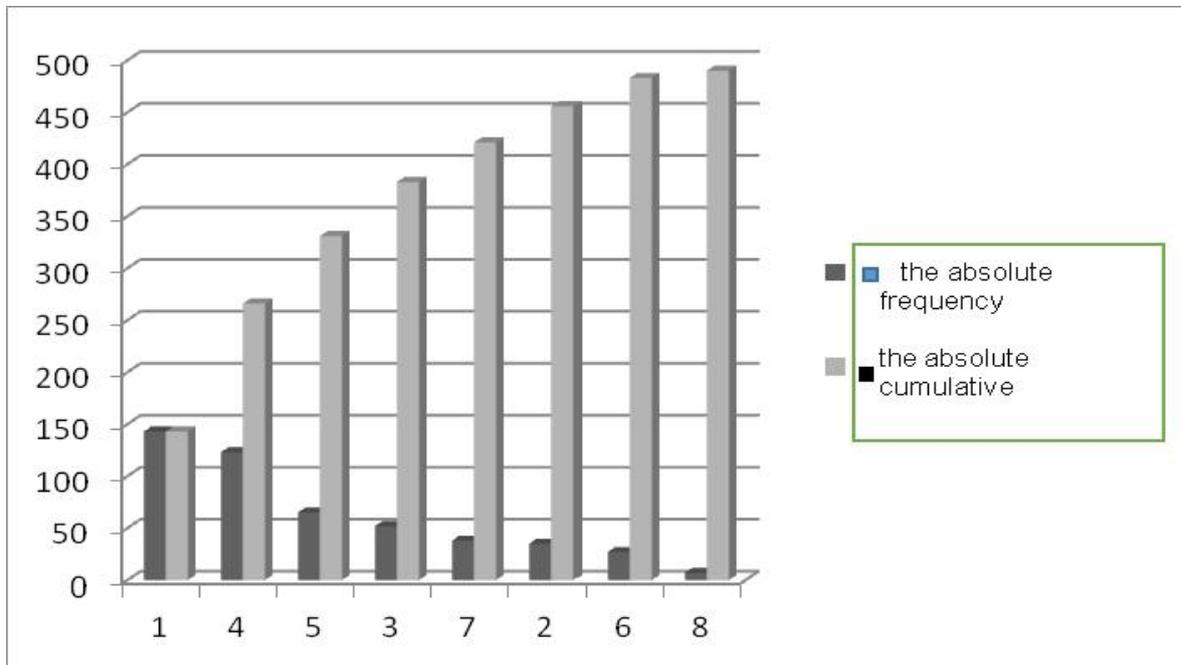

Figure no. 1. Pareto Diagram

The Pareto diagram is a histogram that tells us how many times a look of a situation has been repeated. In the second type of the diagram (relative frequencies), the height of each column is shown which illustrates the relative frequency with which it occurred. Histograms help us to find out the causes of the problem in a process; as we can see, the

first four types of complaints (1, 4, 5 and 3) are the most important ones to be analysed (Figure no. 2).
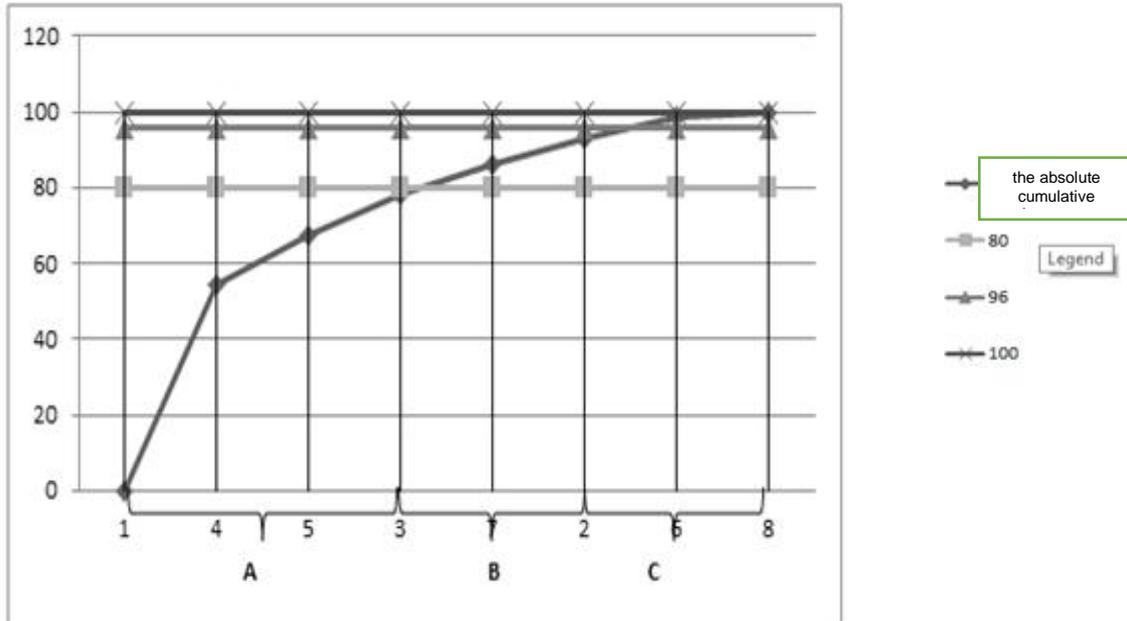

Figure no. 2. Pareto diagram and ABC analysis.

Because it is easier to reduce a high frequency than a low frequency, the diagram shows that it would be more helpful to focus on the first causes: 1, 4, 5 and 3 in area A (80%) than of the secondary: 7, 6, 2, 8 in the B and C areas (96% and 100%, respectively).

Step 4 - Implementing a plan of measures to reduce the number of complaints

To reduce the customer complaints and increase customer satisfaction, the organization must implement a plan of measures that is made available to all employees on all hierarchical lines and align them with the CRM strategy (Table no. 5).

Table no. 5. Plan of measures necessary to minimize the number of complaints

No.	Measures	Effective actions
1	Problem solving time	The development of internal plans based on coaching, mentoring, periodic information sessions, quality circles to ensure, inform and apply the reduction of dead time between the existing activities at the client level by determining and knowing the processes and solving JIT principles and priorities of arrival, Increasing the quality of customer service by developing staff and passing on new knowledge in the field to be trained to carry out such processes, Employing only the trained staff, according to the „man in the right place" principle.
4	Information, customer communication	Informing the client using a communication language in his / her meaning, Transmitting clear information, using transparency and opening, Transmitting to be done in a timely manner, without much expectation, Empathy at the customer level by putting it in place and understanding its problems by providing physical help and

		moral support, Listening to be an active one, based on asking questions, to find out as many answers as to customer satisfaction, his / her wishes and needs, and his / her training for various other processes Creating a database that leads to customer knowledge, promotion of new products or services according to customer wishes Display visible discounts Formation of fidelity cards based on purchase, re-purchase, purchase frequency and store expenditure (RFM). Product presentation to make use of sensory marketing techniques: see, hear, smell, touch. Create an attractive, up-to-date website that uses the AIDA technique).
5	The quality of the offered products and services	Improving the quality of the services offered by referring to training and development programs of sales specialists Improve sales knowledge: listening, empathy, communication, negotiation, persuasion Product quality to keep up with customer wishes and needs (desires from questionnaires, direct discussions, comments, forum, site)
3	Price	Displayed in a visible place Discounts made available to customers through brochures, websites, flyers. Discounts from the shelf in conjunction with the shelves. Discounts applied according to the above-mentioned model (RFM) to motivate retaining loyal customers.

Once these will be implemented in the few actions proposed in the plan of measures necessary to eliminate these causes, another diagram may be developed, after a period, to check the decrease in the number of complaints about both categories.

5. Conclusions

Pareto modelling and analysis are used to indicate the relatively small number of causes that can cause most of the problems encountered or defects that occurred. Under 80-20, 80% of the problems are based on only 20% of the possible causes, the Pareto method helps us prioritize and decide why we will spend more time and what can we postpone.

The proposed actions are just a start in improving customer complaints but not a limit in developing other actions and measures to improve customer relationship and satisfaction.

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