

# Investigation of Factors Influencing On Customer Satisfaction of Products Manufactured By Pharmaceutical Companies

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#### **ABSTRACT**

The purpose of this research is to investigate factors influencing on customer satisfaction of products manufactured by pharmaceutical companies. This study is a descriptive research by classification based on data collection method, or study plan that describes sample features and then it's generalization with statistical population. Descriptive researches are divided in several groups and in this study scalable type applied. In scalable type, the relation between variables described, predicted and analyzed. The result of this study indicated that there is a significant relation in a positive and direct type between received quality independent variable and customer satisfaction dependent variable in an acceptable level. There is also positive and direct significant relation between received quality independent variable and dependent variable of received value in an acceptable level. The finding revealed that there is a positive and direct significant relation between customer expectation independent and received value dependent variables in an acceptable level and customer expectations independent and revived quality variable. This indicated that high customer complaints relating to Dr. Abidi pharmaceutical products will influence probably 33 percent of loyalty rate with the products and customers satisfaction rate of customer satisfaction index is higher than 3.

Key words: Customer Satisfaction, Companies, Pharmaceutical

#### Interdiction

Pharmaceutical industry play an important role as one of the strategic industries in the society health and safety and therefore, always been an attractive area for economists and policymakers. Undoubtedly, customer's satisfaction in this industry is one of the most procedural issues in recent decades. At present, in global economy, customers determine the company survival and the companies could not disregard customer expectations. They must pay a great amount of attention to all their activities and capabilities because the only source of capital turnover are customers. In average, many companies annually lose 10 to 30 percent of their customers but they often don't know when and why they lose their customers. Companies without any concern about losing customers in a traditional manner would emphasize on attracting new customers. Such companies look like a bottomless bucket which lose their customers as water and the managers instead of blocking the hole, look for new resources for attracting more customers (Sharma, (2007).



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Marketing knowledge appearance with Industrial revolution which granted with specialism, mass Mechanized production, and standards, initially outlined for solving organization products selling problems and more profit and developed rapidly. One of the most important revolutions in the field of improving performance has occurred in the last decade twenty's century. The issue of recognizing measurement of customer satisfaction rate considered as an element and main necessity of management systems in Business institutions. Creation and underpinning customer satisfaction measurement systems considered as the most important index for performance improvement in today organizations (Menon &O'Connor, 2007). Provision and service management for customers, widely formalized widely as a strategic resource, competitive advantage and success in the market. Customer servicing implied to the firm ability for determining customer's accurate needs and responding them (Homburg, C. et al. 2005). Today customer loyalty converted to an important issue in marketing researches. Which created some concerns for managers and also transformed to a much advocated strategy among them. (Bodet, 2008) Customers and consumers always look for suppliers who provide better goods or services. Many evidences showed that in today competitive world, discovering customer's needs and wants and also meeting them before rivals is the basic term of company success. In this way, organizations and commercial corporations tried to obtain a privileged condition than their rivals through unique advantages (Payne, 2005).

Customer satisfaction is widely considered one of the key components of a successful business. Knowing how to measure it, what to do with the information and how to improve service based on feedback is one of the most significant, yet challenging, tasks in the hospitality industry. Contributing factors to customer service satisfaction may differ among enterprises as a result of varying standards, but most businesses can agree that customer satisfaction is a measure of how products and services supplied by a company meet or surpass customer expectations (Farris, 2010). Reaching for high potential and peak performance is a desire at both individual and organizational levels (Cummings & Worley, 2009). Many companies have responded to increasing market pressure by seeking to create competitive advantage through employee engagement or customer satisfaction initiatives. Significant investment by a wide variety of organizations goes into collection of customer satisfaction and employee engagement scores. Frequently this is done with either a corporate approach or third party surveys of the firm's customers. Management then solicits suggestions from staff for improvement and ultimately sets targets. This study examined the impacts of involving employees in the collection of customer satisfaction data. Employee involvement has been shown to improve the quality and timeliness of customer decisions, employee commitment to the decisions, and subsequently, customer satisfaction (Bowen & Lawler, 1992). According to Singh (2006), one of the fundamentally important drivers of organizational success is that companies must take the needs and wants of their customers into account. That is the reason why researchers such as Gustafsson, Johnson, and Roos (2005); Carpenter (2008); Bridson et al (2008) have paid attention to the importance of customer satisfaction, loyalty and retention worldwide. People have always had a desire to know and



understand consumers, their needs and wants. The consumer buying behavior has been a debatable topic for so many decades around the world; previously, many researchers had studied this topic and found exploratory findings in different contexts (Florez-Lopez, et al., 2012),

#### **Statement Problem**

In today's world, measurement of customer's satisfaction is very important. Industries could be hopeful in their survival and profit in cases that they measure their customer's satisfaction by obtaining an efficient and consistent method and recognizing factors which influenced them for a higher level of improvement. Investment would be effective if customer needs were taken into account, as the target of investment is closely-linked with customer attraction and consequently more sale (and consequently more profit). It is natural that in this condition capital interest will increase by meeting these needs and capital turnover will be ensured as well. Nowadays, regarding limited resources, per any dollar a company charged must have a plan and the best way of reliability about measuring the production's success would be via asking the people who are supposed to consume them Gustafsson, et al (2005).

Having emphasized in the importance of this topic, we must seek procedures to recognize and measure customer's satisfaction, antecedent and succulent factors as well as their interrelationship. Pharmaceutical industry of the country, as one the largest and one of the most critical industries that produces complex products, currently has a weaker marketing kernel. Today, pharmaceutical industry mangers are under extra-ordinary pressure due to ever increasing and unexampled need of society to pharmaceutical products (Cummings and Worley, 2009). On the other hand, the modern and strict set of standards introduced by the states has led to a situation in which the existing technologies could not be responsive to these new standards and the new requirements, while pharmaceutical industry suffers from a strong marketing bias on customer satisfaction.

Pharmaceutical companies tried to develop health, treatment and well-being department by the purpose of supplying the country mediational needs and issuing it to the consuming markets towards a healthy society and determine superior goals such as: protection and improvement of quality, simple accessibility to medication, better services for patients, using new production methods, employment, avoiding currency emission from the country and suitable profit- these goals fulfillment needed various scientific and technology parts study, recognition of new medical productions, placing in allowable Iranian mediational system and correction of production cycle quality and modern pharmaceutical systems development. Marketing and export policies of this company followed by programs in the field of evaluating customers satisfaction by presenting permanent products to customers, creating innovation in sale marketing, friendly relation and reasonable competition with inside and outside rival companies and also using exporting Iranian companies capability(Bridson et al ,2008). Pharmaceutical companies play important role in the



field of main diseases based on the last international standards and considering the most appropriate cost for final consumer in the health part. Statistics have been obtained by spectacular investment and rate of medication demand rate in the potential market which has not met sale and senior manager's satisfaction and imposed researchers to recognize effective factors on their customer's satisfaction to make correct decisions and good market share. Even though previous researches have investigated the influence of general individual factors such as income level, user status and social class on customer satisfaction, there are limited studies focusing on the factors influencing consumer satisfaction of customers of products manufactured by pharmaceutical companies which this study is designed to accomplish. Therefore, the main purpose of this research is to investigation of factors influencing on customer satisfaction of products manufactured by pharmaceutical companies.

#### Methodology

This study is descriptive one in research classification based on data collection method, or study plan which describes sample features and then it's generalization with statistical population. Descriptive researches divided in several groups and in this study scalable type applied in scalable type, the relation between variable described, predicted and analyzed. ACSI model determines the relations between received quality with customer satisfaction, received quality with received value, customer expectations with satisfaction, customer expectations with received value, customer expectations with received quality, received value with customer satisfaction, customer satisfaction with customer loyalty, customer's satisfaction with customer complaints, customer complaints with customer loyalty. In order to measure this relations, Fornell et al (1996) study questionnaire has been adapted and a questionnaire designed by Likert-5 scale with options on very few to very high. In the present study, pharmacy experts as statistical population (Responsible pharmacist or pharmacist) were selected due to their comprehensive knowledge on production process, quality, standards and safety of pharmaceutical products on one hand and reception of highest amount of feedback from customers on the other hand. The statistical population included 65 pharmacies in the country, 135 pharmacists and pharmacy technical manager. In this study, considering the limited statistical population, 100 subjects were used from Kerjesi and Morgan table for statistical sample volume.

### **Results and Findings**

The t-test and regression results obtained from PLS software test determined in Figure (1)



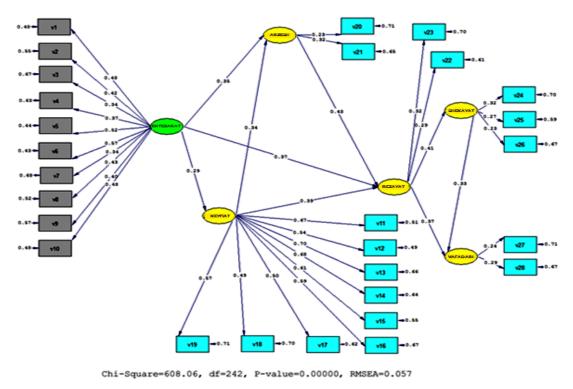


Figure 1: Measurement Test Regression Results.

## **First Hypothesis:**

# The quality of pharmaceutical products obtained by pharmaceutical products obtained by pharmaceuticals has an effect on the customer's satisfaction.

From the first hypothesis test concluded that there is a significant relation between received quality independent variable and customer satisfaction dependent variable which is acceptable in a positive and direct type. Final effect of received quality variable on customer satisfaction variable calculated almost 35% which indicated that high received quality related to Saha firm pharmaceutical products probable influenced 35% of customer satisfaction relating to the products. These findings therefore matches with previous studies' results (Kotler. al 2009). In other words, Dr. Abidi pharmaceutical company provides high quality products and services which consequently leads to an increased customer satisfaction.

### **Second Hypothesis**

# The quality of pharmaceutical products from pharmaceutical company has an effect on the values of their customers.

Testing the second hypothesis, it is concluded that there is significant relation between received quality independent variable and received value dependent variable which is acceptable in a direct and positive type. Final effect of received quality variable on receive value variable calculated almost 34 percent. This showed that the high received quality relating to Saha pharmaceutical



products probably influenced 34 percent of received value relating to the products. This result matches with previous studies (Ball et al 2004- Anderson and Fornel 2000, Mousavi et. al 1388). Therefore, it could be supposed that for increasing received value in customer's mind, if the managers intended to invest in quality section, ensuring customers with the variability and safety of the products, they will be closer to the target.

## Third hypothesis

# The customer expectations of pharmaceutical company have some effects on the satisfaction of these customers.

Testing the third hypothesis, concluded that there is significant relation between customer expectation independent variable and customer satisfaction. Dependent variable which is acceptable in positive and direct type final effects of customer expectation on customer satisfaction calculated almost 37%. This represented the fact that the high customer expectation relating to Dr. Abidi pharmaceutical products influenced approximately 37 percent of customer satisfaction within the product different aspects.

### **Fourth Hypothesis**

## The expectations of pharmaceutical company customers are affected by the values of their customers.

From the fourth hypothesis it was concluded that there is a significant relation between customer expectations. Independent variable and received value dependent variable which is acceptable in a direct and positive type. Final effect of customer expectations variable on customer satisfaction variable calculated about 35 percent. It is indicated that high customer's expectation relating to Dr. Abidi pharmaceutical products probably influenced about 35 percent of customers received value relating to products. This result matches with previous studies (Ball et al 2004, Anderson 2000, Martines et. al, 2000, Mousavi et. al 1388).

#### **Fifth Hypothesis**

# The expectations of Pharmaceutical's customers' are affected by the quality of products provided by the company.

Testing the fifth hypothesis, it was concluded that there was a significant direct positive relation between customer independent expectation variable and the quality received dependent variable. Final effect of customer expectations on received quality variable calculated almost 29 percent. It demonstrated that high customers' expectations relating to Dr. Abidi company pharmaceutical products almost influenced 29 percent of the quality received in their products. This result matches with previous studies results. (Idin and Azar, 2005, Ball et. al 2004, Anderson and fornel 2000, Fornel 1989, Aklof 2000) Thus, paying attention to the standards that customers have in their mind, could be very important as an evaluation and judgment criteria.



### Sixth Hypothesis

#### The values of company's products affect the satisfaction of their customers.

The sixth hypothesis was tested and it was concluded that there is a significant relation between received value independent variable and customer's satisfaction dependent variable which is acceptable in a positive and direct type. Final effect of receive value variable on customers satisfaction variable calculated almost 43%. It is demonstrating that high received value by the Saha pharmaceutical products, probably influenced 43 percent of customer's satisfaction relating to the products.

### **Seventh Hypothesis**

## The customer satisfaction of products has an effect on customers' loyalty.

From the seventh hypothesis results, it was concluded that there is a significant volition between customer satisfaction independent variable and customer loyalty dependent variable which is acceptable in a direct and positive type. Final effect of customer satisfaction variable on customer's loyalty variable calculated almost 37% it is indicated that high customer's expectation of Saha pharmaceutical products probably influenced 39 percent of customer's satisfaction relating to the products. This finding will be superposed with Kronin and Tailor (1992) and Mc.Alexander et. al (1994).

## **Eighth hypothesis**

#### The customer satisfaction of products has an effect on customers' complaints.

The eighth hypothesis was tested and it was concluded that customer satisfaction exogenous indigenous variable course variable on customer rate indigenous variable  $Y_3$ =0.41 with t value equals 2.44 in 0.05 error level by statistics 95% confidence is significant, therefore, by accepting eighth hypothesis concluded that there is a significant relation between customer satisfaction independent variable and complaint rate dependent variable which is acceptable in a positive and reverse type. Final effect of customer satisfaction variable on complaint rate variable calculated about 41 percent it is indicated that customer's satisfaction relating to Dr. Abidi company pharmaceutical products, probably influenced 41% of customer's complaint to the products.

#### **Ninth Hypothesis**

### The complaints of company's customers have an effect on their loyalty.

From the ninth hypothesis test it was concluded that customer expectations exogenous indigenous variable course variable on customer satisfaction indigenous variable  $Y_3$ =0.33 by the t value equals 2.67 in error level 0.05 with the statistics 0.95 confidence is significant. Therefore, from the ninth hypothesis acceptation, it is concluded that there is a significant relation between variable and customer loyalty rate dependent variable which is acceptable in a direct and reverse type. Final effect of customer complaint variable on customer loyalty variable calculated almost 33% percent.



It is indicated that high customer's complaint relating to Dr. Abidi company pharmaceutical products, probably influenced 33% of loyalty rate to the products.

#### **Research Question**

Are customers of Dr. Abidi pharmaceutical company satisfied with the products they receive? In responding this question were can regard average statistical sample views about determined index for customer satisfaction in the questionnaire and the comparison with customers' expectations, obtained scores of Saha pharmacy company, on one hand (CS) formula could be known as the result of difference between (E) and (P). (Customer expectation - real performance of the companies).

CS=P-E

Satisfaction 
$$CS > 0$$

IF

Non satisfaction  $CS \le 0$ 

Where Cs of Pharmacy Company calculated 33%, we can Say Saha pharmacy company products had relative satisfaction of its customer.

Also, by using t student test, we can test the hypothesis related to this question.

$$H_{0} = \mu cs \le 3$$
  
 $H_{1} = \mu cs > 3$ 

One-Sample Test						
	Test Value = 0					
					95% Confidenc	e Interval of the
				Mean	Difference	
	t	df	Sig. (2-tailed)	Difference	Lower	Upper
rezayat	4.530	19	.540	4.60000	4.3648	4.8352

Table 1: T-Sample Test Results

Table 1 showed sig bigger than 5 percent. Customers satisfaction rate of customer satisfaction index is higher than 3. On the other word, general satisfaction of customers of Saha pharmaceutical products with 95% confidence placed between 4.3648 to 4.8352 intervals.

#### Conclusion

One of the effective environmental factors on organizations are customers, management authors and customer satisfaction which are the most important duties and organizations management



priorities which considered the necessity of superior manager's stability and consistency to attract customer's attention as the pre-term of success. Indeed, one of these organization. Complete recognition of customers, and considering them as antecedents and presenting quality services are success factors in today trade market. Interpretation of customer completely differed from what was common before. Means that the customer is no more mere purchaser of the product or services, but considered as effective and active member in commercial activities. Therefore, having modern strategy, regarding important points in creating relation with customers, maintaining and expanding it and effort for attracting customer satisfaction in every in every stages, efficiency and effectiveness of that increased organization customer oriented goals fulfillment and in long term granted a state for loyal customers. The terms customer and satisfaction in service organizations duplicated its importance due to complete dependency of customers for survival. Presenting different services for various pharmaceutical companies indicated this importance for maintaining present customers and attracting new ones and finally obtaining more share of competitive market. This study investigated the subject of effective factors on pharmaceutical company's pharmacy products customer satisfaction.

Doubtfully, the most important issue in a research, is selecting and using a scientific method by which could obtain a scientific and applied result. While correct methodology hasn't been conducted, study results. Researcher and user will be diverted. Regarding to this issue, selecting a rational method will be necessary for reaching desired results with scientific regular and realism spirit. Methodology is a series of rules, principles, instruments and reliable and systematic methods for investigating realistic, discovering unknown things and obtaining problems solutions - in this study, methodology is Reversion and multiple regression type. Which the effects between variables analyzed based on the study target to by using performance analysis the distance between customer and performance quality determined and while the customer himself announced his satisfaction rate, indicated extraordinary enthusiasm and if we send survey results orally and / or in written form, remarkable tendency for re-incitement and next survey would be observed and then constant improvement increased by good relation between customer and obtaining satisfaction that finally increased company income and for this we need modeling customer service. Trade that by means of that customer will purchase the service and use seller experience (Jazni -1382-242).

More attention to expectations and hidden needs of customers, collecting and classifying needs and operating them in production for improving products quality. Training and improving staff knowledge for presenting consultations and responding pharmaceutical products consumer's questions. Coordinating and relating design, production and Marketing sector for meeting new needs of customers. Customer's complaints management and finding discontent causes and solving recognized problems. Presence of Mechanized system in producing Saha pharmaceutical products which caused efficiency improvement and products cost decrease. Presence of customer relation system and creation of customer's database. Distribution and speed channels management in presenting products and services. The result of this study indicated that there is a significant



relation in a positive and direct type between received quality independent variable and customer satisfaction dependent variable in an acceptable level. There is also positive and direct significant relation between received quality independent variable and dependent variable of received value in an acceptable level. In addition, there is a positive and direct significant relation between customer expectations independent variable and customer's satisfaction dependent variable in an acceptable level. The customer expectation independent and received value dependent variables are also in an acceptable level. The finding revealed that there is a positive and direct significant relation between customer expectation independent and received value dependent variables in an acceptable level and customer expectations independent and revived quality variable. This indicated that high customer complaints relating to Dr. Abidi pharmaceutical products will influence probably 33 percent of loyalty rate with the products and customers satisfaction rate of customer satisfaction index is higher than 3.

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