

## **A Comparative Study to Determine Customer's Satisfaction from after Sales Services in the Automotive Industries**

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**Abstract:** There are many differences between present customers and those of seven years back as the present customers have freedom of choice and comment. But there were no definition for freedom of choice, customer's satisfaction, providing customer's demand, losing the market portion, losing sale and so on in the past due to the presence of inclusive markets in which there was no place for competition. Regarding the fact that the only merit of competitive automobile sale companies is in the method of presenting after sale services, thus every automobile company which provides better and higher qualities will be more successful and will have a larger portion in the market. The research methodology applied in this study is defined and performed in two phases. First phase: determination of customer's satisfaction from after sale services is carried out by studying current considerations about after sale services in Iran from customers' point of view via survey method or field analysis. Second phase: the research methodology is comparative in which procedure modeled methodology is used in it. All sub procedures of 3 similar companies which have the same trade and business are compared to each other accurately. Three comparing companies are General Motors Company, Irankhodro and Bahman Group in this research. First, the results of the rate of customers' satisfaction of after sale services for the three companies in every five dimensions were analyzed separately.

**Key words:** Customer's satisfaction · After sale services · Services quality · Customers' expectations · SERVQUAL

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### **INTRODUCTION**

Nowadays, automobile market is become competitive severely and choosing a product is became a hard and complicated job for customers. Local produced automobiles are increasing in quality and variety and their prices are decreasing. On the other hand, imported automobile market is prospered by opening the borders severely too as it possesses a significant part of the market.

There are a lot of differences between the present and 7 years back customers. The present customers have freedom of choice and freedom of comment. But there were no definition for freedom of choice, customer's satisfaction, providing customer's demands, losing the market portion, losing sale and so on in the past due to having an inclusive market without any competition.

Regarding price, quality and option, sale method, sale price, all automobiles are on the same level and have a slight difference. The only competitive merit of automobile companies is in their methods of presenting after sale services. Therefore, a company will be more successful which can provide better services and higher qualities to win a larger portion of the market in the present time.

### **Review of the Related Literature**

**Theoretical Backgrounds:** Regarding the rapid growth of automobile production and sale in the country and the almost low rate of the growth of after sale services and the need for maintaining customers, there is only one way to make progress over the competitors which is progress in after sale services. The today customers have the today needs and requirements as the old repair garages cannot fulfill their needs. Therefore designing the processing after

sale service model in which the customers' expectations or generally the customers' satisfaction is achieved comparing to the present condition, is one of the major necessities of this essay. To achieve this important aim, this research designed by modeling from three similar companies.

One of the aims of automobile industry managers is to make use of Total Quality Management (TQM) in all production, sale and after sale services processes. Modeling is one of the fundamental principles of Total Quality Management. The main aim of this paper is to access to a model in order to upgrade the quality level of after sale services via comparison with the best companies by the use of modeling in automobile after sale services. Of course, it is worth mentioning that the policies and processes of Parents Company and dealers are very effective in accessing such aim and objectives. Miller (1995) said: "Parents Company (automobile) has not to forget that it cannot access customer's satisfaction without the satisfaction of dealer of the Parents Company as this relation is direct [1]. If dealer is satisfied with the Parents Company, the customer will be satisfied too, but if dealer is not satisfied with the Parents Company and if it provides all supporting packages, the customer's satisfaction will not be obtained.

After sale services is one of the organizational processes which companies perform it considering the growing competition and for attracting entrepreneurial opportunities for increasing profitability and better access to the market and increasing the customer satisfaction level [2, 3]. It has been mostly used to describe services that are provided to the customer after the products have been delivered [4-7].

Presenting service to customers is a two side relation in which one side is the automobile (selling) company and the other side is the dealer. Each side has a significant role in presenting service to customer and they can access to customers' satisfaction, establishing faithful customers, increasing sale market portion and profitability obtained from presenting services based on the defined strategies. The following table separates the portion of each side.

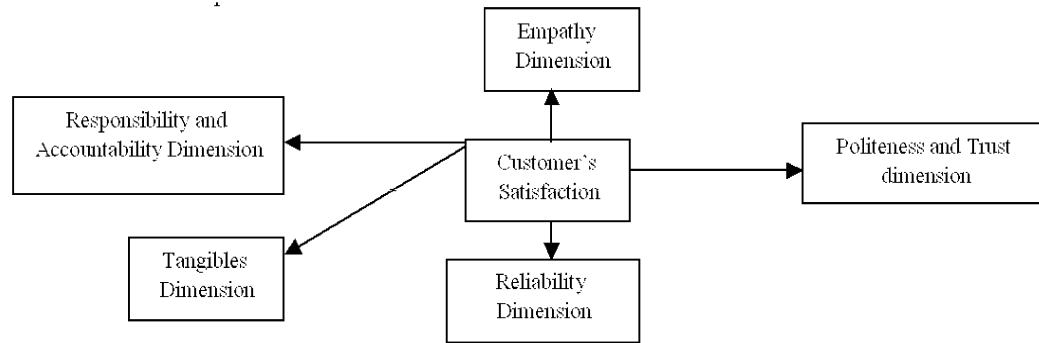
All action of Parents Company and dealers which are performed in order to present services will be carried out by the dealers and by the customers' evaluation via referring to the dealers. Therefore, processes of providing services for customers should be designed in such a way to establish long term relations and faith in customers.

Developing the network of the dealers from distance and number dimensions would be based on sale number and sale region, troubleshooting teaching and fixing automobile for technical personnel in dealers' network, providing repair and troubleshooting standards, spare parts catalogues, designing spare parts enquiry systems, stock control, providing particular instruments for fixing and troubleshooting are of the main responsibilities of the Parents Company as far as presenting services to customers are concerned.

On the other hand, regarding high expenses of establishing a service centre (dealer), automobile companies present after sale services via making use of the investors in the private sector. Therefore, these dealers have some responsibilities including: changing the appearance of the dealer to an automobile clinic, making use of experienced and professional personnel, implementation of mechanized systems and using them, providing fixing equipment and instruments and using them, appropriate planning and organization to present service in the shortest possible time and the lowest expenses, preventing of the return rate of repairs and establish trust feeling in customers from fixing, problem solving and auto service. Every strategy, process or policy includes a series of major points and key words in which if these keys of success are applied and implemented, the aims will be achieved for sure. The marketing system of automobile after sale services is a variable (moody) system. First, customer's needs and requirements from after sale services should be defined. Parasuraman, *et al*, (1991) defined customer's satisfaction in automobile after sale services in five major packages (Table 2) in which the following tables introduce each sub-indexes of the five major indexes:

Table 1: Responsibility separation of the dealer and Parents Company and automobile after sale services network

Parents Company (Automobile)	Dealer
Expanding dealer network (distance and number dimension)	Dealer appearance (based on standards)
Providing necessary teachings for dealer personnel	Fixing quality (using efficient and specialist labour force)
Availability of standard spare parts	Using special workshop instruments and equipment
Providing procedures, instructions, system information	Transcribing announced standards of the Parents Company
Providing catalogues including standard fixing time and troubleshooting	Fixing according to standard time



Source: [8]

Table 2: Variables of SERVQUAL

Variables	Descriptive
Tangibles	Satisfaction rate of the dealer appearance Satisfaction rate of the dealer personnel's appearance Satisfaction rate of modern equipment Satisfaction rate of the form attractions (receipts, enquiry forms, ...) Satisfaction rate of the signs attractions (like boards, signs, ...) Satisfaction rate of access to the dealer
Reliability	Satisfaction rate of fixing quality Satisfaction rate of troubleshooting Satisfaction rate of responding all demands Satisfaction rate of repairs speeds Satisfaction rate of premium services (the stated demand is fulfilled) Satisfaction rate of the automobile appearance after service
Politeness and Trust	Satisfaction rate of personnel receiving Satisfaction rate of personnel's skill Satisfaction rate of trust in personnel Satisfaction rate of fixing costs Satisfaction rate of components costs Satisfaction rate of spent time for fixing
Responsibility and Accountability	Satisfaction rate of personnel (experienced and specialist) Satisfaction rate of provided information ( technical explanations while fixing and after delivering ) Satisfaction rate of personnel number (for receiving and ... )
Empathy	Satisfaction rate of official working hours (delivery and clearance) Satisfaction rate of customer care Satisfaction rate of customer greeting and receiving Satisfaction rate of organization fair behavior

Source: [8]

**Methodology:** The research methodology applied in this research is defined and performed in two phases. First phase: determination of customer's satisfaction from after sale services is carried out by studying current considerations about after sale services in Iran from customers' point of view via survey method or field analysis. The researcher interview 400 customers between 2 understudied companies separately. 25 questions had been asked from every customer. Second phase: the research methodology is comparative in which procedure

modeled methodology is used in it. All sub procedures of 3 similar companies which have the same trade and business are compared to each other accurately.

**Research Validity:** In the present research, efforts are made to design a questionnaire based on appropriate backgrounds of theories and their applied applications considering indexes which measure constructions regarding the positive background of model and regarding the variables of the major models. The research

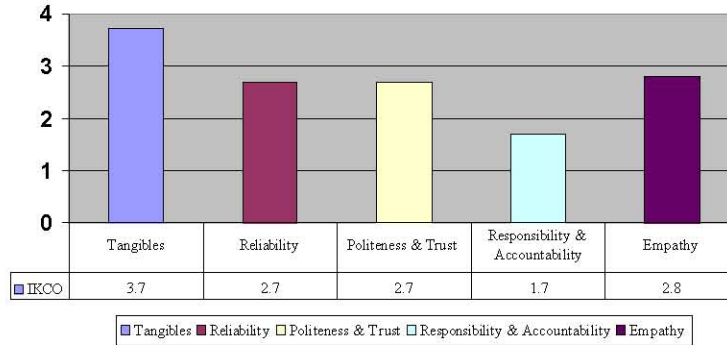


Fig. 1: Indexes amount in Irankhodro Company (IKCO)

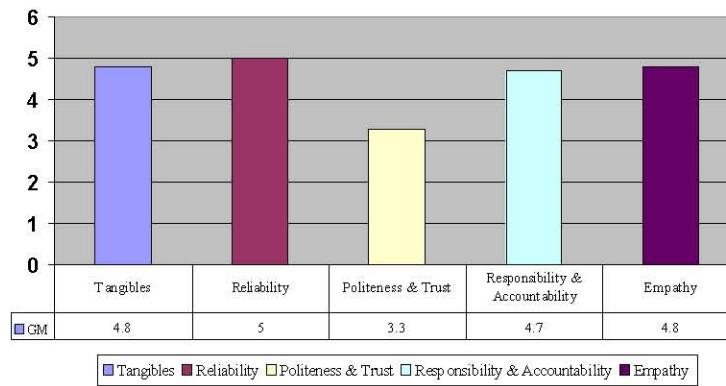


Fig. 2: Indexes amount in General Motors Company (GM)

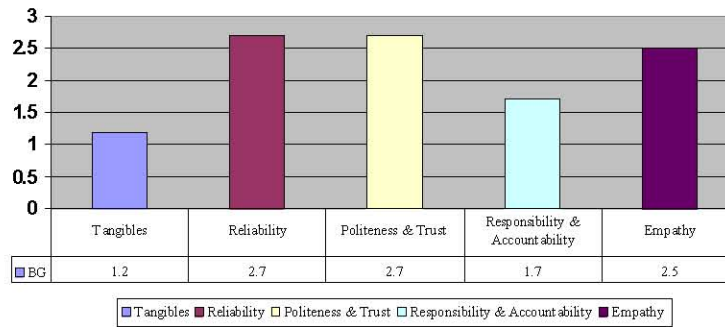


Fig. 3: Indexes amount in Bahman Groups (BG)

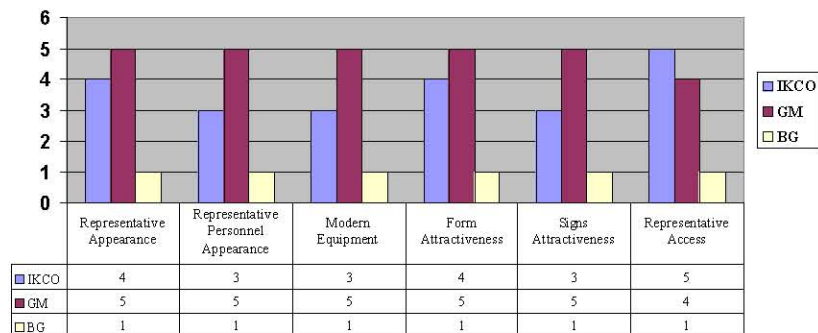


Fig. 4: Efficient indexes in “Tangibles” dimension in the three understudied companies



Fig. 5: Efficient indexes in “Reliability” dimension in the three understudied companies



Fig. 6: Efficient indexes in “Politeness and Trust” dimension in the three understudied companies

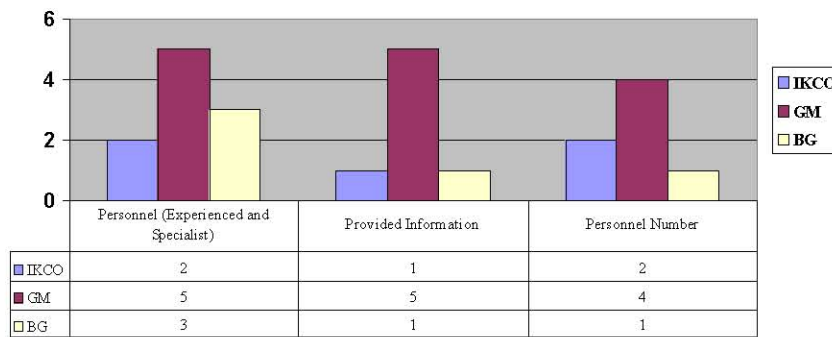


Fig. 7: Efficient indexes in “Responsibility and Accountability” dimension in the three understudied companies

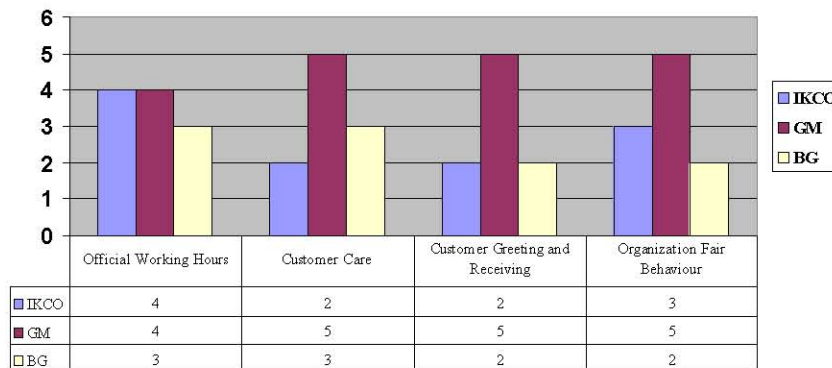


Fig. 8: Efficient indexes in “Empathy” dimension in the three understudied companies

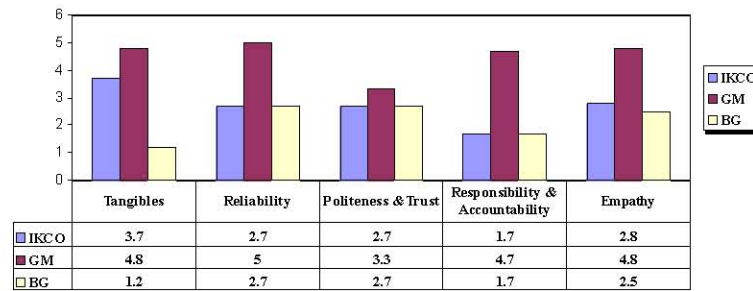


Fig. 9: Results final comparison

questionnaire possesses the appropriate validity with regards to testing the SERVQUAL model in various essays and its confirmation by professors and marketing elites.

**Research Reliability:** For determining reliability of the study Cronbach’s Alpha method has been used. In this research, it is measured based on SPSS software. The first pretest 76% had upgraded to 88% in the second pretest. In addition, 400 questionnaires were returned in the main distribution and Cronbach Alfa was measured as 91%.

**Companies Analyses:** Three comparing companies are General Motors Company, Irankhodro and Bahman Group in this research. First, the results of the rate of customers’ satisfaction of after sale services for the three companies in every five dimensions were analyzed separately.

All three companies have long experience regarding sale and after sale services. General Motors has 2500 dealers, Irankhodro has 1776 dealers and Bahman Groups has 155 services dealers.

Results show that General Motors Company has a very appropriate condition and Bahman Groups and Irankhodro have the next ranks by a far distance. Therefore, General Motors Company and Irankhodro Company as a foreign company and a local company are good selections for comparing scale and modeling.

After that, the researcher analyzes the sub-indexes in the three companies in various dimensions separately in which the following resulted were obtained:

**The Results of Companies Analyses:** The above diagram is shown according to indexes related to Bahman Motor Group (BG). As it can be observed from the diagram, Bahman Motor Company has no significant difference with the other local similar company (IKCO) in all the indexes. But, it has a significant meaningful difference with foreign company (GM) in all the above indexes.

It has no difference with IKCO Company in reliability dimension which focuses on the satisfaction rate of removing automobile problem and satisfaction rate of the

presented speed and quality of services, but this dimension in GM Company is almost twice bigger than its rate in the two local companies.

Almost all the three companies show the close points in politeness and trust dimension in which its effective indexes include personnel’s skill and receiving and the expenses of services and used parts.

There is much difference between the two local companies and the foreign company in the empathy dimension which focuses on behaviour with customer and organizational factors.

The most difference is there between the two local companies and the foreign company in the responsibility and accountability dimension which shows the satisfaction rate of accountability for customer and providing sufficient information for customers in which the amount of this index in the foreign company is three times bigger than that of Bahman Motor Company.

In Tangibles dimension, much difference can be observed between local company and the foreign company. The effective indexes in tangibles dimension include customer’s perception of the dealer and personnel appearance and the satisfaction rate of access to the dealers of after sale services.

The results were analyzed, interpreted and compared to each other after analysing the results of customer’s satisfaction in the three companies separately. Irankhodro and Bahman Group processes were established in the place and the researcher made use of the general Motors processes. The processes of after sale services divided into 6 sub-processes which include appointment making, reception, fixing, parts enquiry, quality control and clearance. Each one of the sub-processes is compared to each other separately and their weak and positive points are analyzed and interpreted. The researcher designed the processing after sale service model by the use of the obtained results in the satisfaction analysis in the three companies at the end.

**Performing the Model in a Dealer and Re-measuring Customer’s Satisfaction:** After designing a suggesting optimized model, this model has been implemented in one

Table 3: Comparing indexes in Bahman Motors Company (Before- After)

Variables	Description	Indexes Points			
		BG(BEFORE)		BG(AFTER)	
Tangibles	Satisfaction rate of the dealer appearance	1	1.2	1	2.0
	Satisfaction rate of the dealer personnel's appearance	1	1		
	Satisfaction rate of modern equipment	1	3		
	Satisfaction rate of the form attractions (receipts, enquiry forms, ...)	1	4		
	Satisfaction rate of the signs attractions (like boards, signs)	1	1		
	Satisfaction rate of access to the dealer	2	2		
Reliability	Satisfaction rate of fixing quality	3	2.7	3	3.3
	Satisfaction rate of troubleshooting	3	3		
	Satisfaction rate of responding all demands	3	4		
	Satisfaction rate of repairs speeds	3	4		
	Satisfaction rate of premium services (the stated demand is fulfilled)	2	2		
	Satisfaction rate of the automobile appearance after service	2	4		
Politeness and Trust	Satisfaction rate of personnel receiving	3	2.7	3	3.0
	Satisfaction rate of personnel's skill	3	4		
	Satisfaction rate of trust in personnel	2	2		
	Satisfaction rate of fixing costs	3	3		
	Satisfaction rate of components costs	2	2		
	Satisfaction rate of spent time for fixing	3	4		
Responsibility and Accountability	Satisfaction rate of personnel (experienced and specialist)	3	1.7	4	2.0
	Satisfaction rate of provided information ( technical explanations while fixing and after delivering )	1	1		
	Satisfaction rate of personnel number (for receiving and ... )	1	1		
Empathy	Satisfaction rate of official working hours (delivery and clearance)	3	2.5	5	3.3
	Satisfaction rate of customer care	3	4		
	Satisfaction rate of customer greeting and receiving	2	2		
	Satisfaction rate of organization fair behaviour	2	2		

Source: [8]

of the best dealers of Bahman group. In order to retest the validity, the rate of customers' satisfaction was repeated by the same questionnaires and the following results were obtained:

**Comparing the Implement Model with Two Understudied Companies:** At the end, a comparison was carried out between the results of polls of Bahman Group after performing modeled process with two other companies.

In the above diagram, the results of points of all the three companies in "Tangibles" dimension are compared. The considered results are related to Bahman Motor Company related to after performing new process of after sale services.

As we can see, the increase of points can be observed in the two sub-indexes of 3(satisfaction of modern equipment) and 4 (satisfaction of forms attraction).

The above diagram shows the comparison of sub-indexes in "Reliability" dimension in the three understudied companies.

Regarding the comparison of points, the increase of points can be observed in the three indexes of 3(satisfaction rate of fulfilling all demands), 4 (satisfaction rate of fixing speed) and 6(satisfaction rate of automobile appearance while delivering).

The above diagram shows the efficient indexes in "Politeness and Trust" dimension in the three understudied companies.

Regarding the indexes amount before performing the new process, the increase of points can be observed in the two indexes of 2(satisfaction rate of personnel's skill) and 6(satisfaction rate of spent time for fixing).

The above diagram shows the efficient indexes in "Responsibility and Accountability" dimension in the three understudied companies.



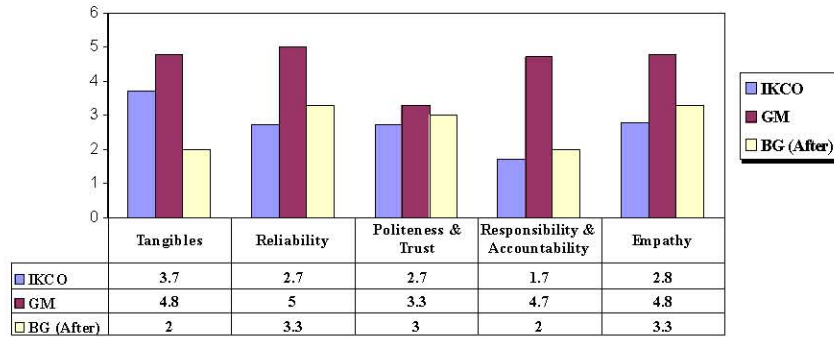


Fig. 10: Comparing the results of polls of Bahman Group after performing modeled process with two other companies

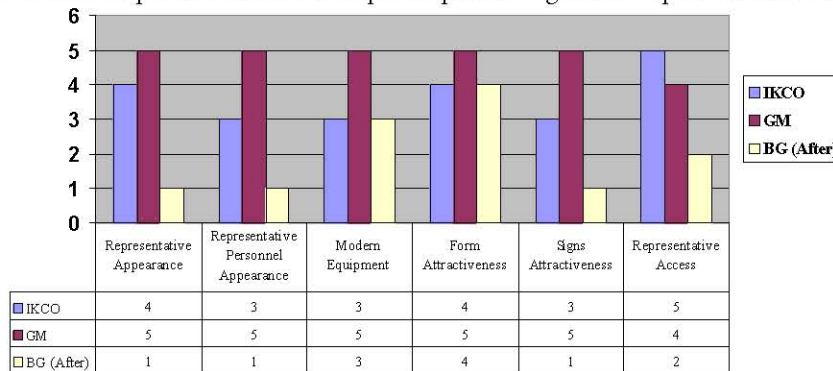


Fig. 11: Comparing after results and two other companies of “Tangibles” dimension



Fig. 12: Comparing after results and two other companies of “Reliability” dimension

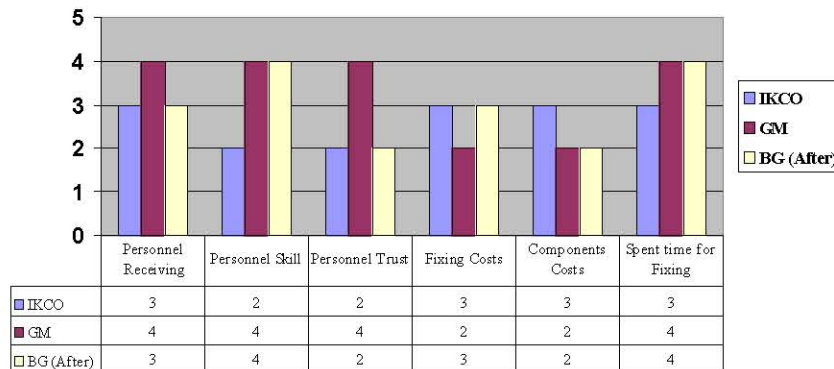


Fig. 13: Comparing after results and two other companies of “Politeness and Trust” dimension



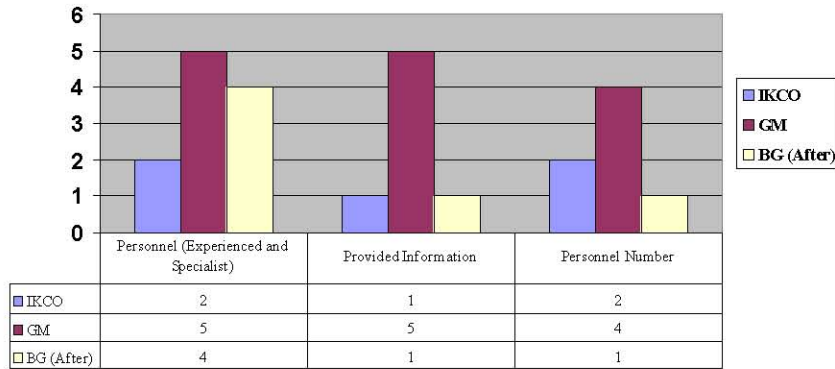


Fig. 14: Comparing after results and two other companies of “Responsibility and Accountability” dimension



Fig. 15: Comparing after results and two other companies of “Empathy” dimension

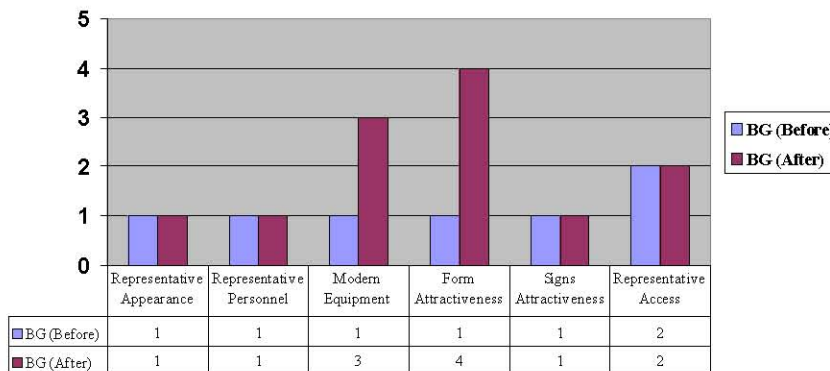


Fig. 16: Comparing tangibles by dimensions separation in Bahman Motor Company (Before- After)

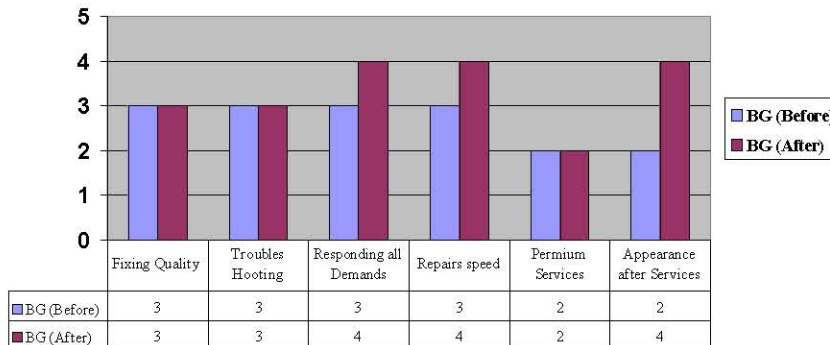


Fig. 17: Comparing reliability by dimensions separation in Bahman Motor Company (Before- After)

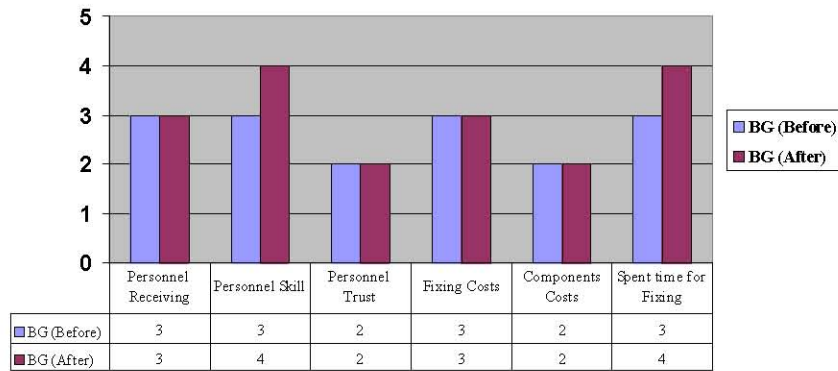


Fig. 18: Comparing politeness and trust by dimensions separation in Bahman Motor Company (Before- After)



Fig. 19: Comparing Responsibility and Accountability by dimensions separation in Bahman Motor Company (Before- After)

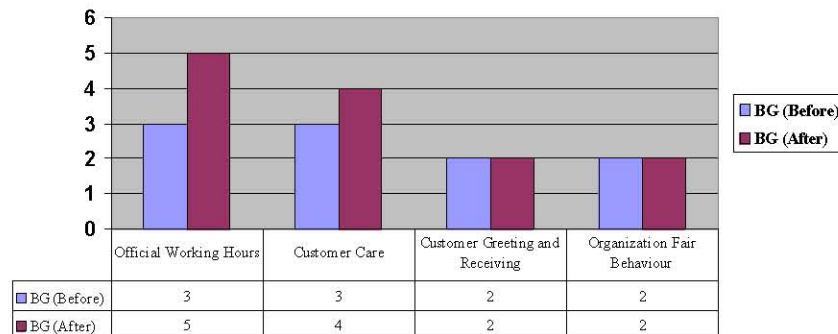


Fig. 20: Comparing Empathy by dimensions separation in Bahman Motor Company (Before- After)

The first index in Bahman Motor Group is increased from 3 to 4 average which is clear regarding the relevant index in which increasing educational hours and using experienced and specialist personnel were very effective in this process.

The above diagram shows the efficient indexes in “Empathy” dimension in the three understudied companies.

In sub-indexes related to this dimension, the significant increase of points can be observed in the two indexes of “satisfaction rate of comfortable working hours” and “satisfaction rate of customer care”.

### CONCLUSION

Regarding the above diagrams, 10 indexes are increased totally. In order to define the corrective actions, all effective and influential factors on indexes were analysed and interpreted and corrective actions were classified according to expenditure criteria, possibility and ease of performance.

The process of suggesting after sale services was reformed according to corrective actions and was implemented in order to measure customer’s satisfaction in Bahman Group Company. According to the obtained

results, the above comparisons were carried out after performing the process and observing the increase of points in each one of the indexes shows the performance of at least one corrective action.

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