THE INVESTIGATION OF THE RELATIONSHIP BETWEEN TOTAL QUALITY MANAGEMENT (TQM), MARKET ORIENTATION AND SERVICE QUALITY IN THE INSURANCE INDUSTRY
(CASE STUDY: ESFAHAN PRIVATE INSURANCE CENTERS)

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Abstract: *It is of great importance to implement TQM in organizations such as insurance that customers are not voluntary buyers for their services because its main focus is on the customer needs. But since implementation of such is not singly enough for the success of any organization and according to the market and customers needs and yet ever entering the new competitors and increasing the loss of competitiveness, organizations will be required to be market-oriented and attract customer satisfaction. Nevertheless trust and customer satisfaction can not be achieved except by offering the promised better services, so nowadays offering a qualified services is considered as one of the fundamental aspects in the all service organizations, so the aim of this study is to determine the extent of TQM effects on the market orientation and services quality in the Isfahan private insurance companies. This research is descriptive- survey type and of correlation research branch with the application nature. The questionnaire was used to collect data. Justifiability of the questionnaire was approved by the respected supervisors, advisors and insurance professionals. in this study classification sampling method has been used initially, 30 questionnaires were distributed that its reliability was proved by Cronbach's alpha 0.952 and finally distributed between 198 directors, deputies and employees of Isfahan private insurance companies of 408 population people and all questionnaires were returned with collaboration of most respected managers of these companies. In this study, software SPSS and AMOS for the data analysis were used. The results indicate that meaningful pathways criterion was smaller than the threshold of 0.05 at the 95% confidence level. So relationship between TQM and market orientation and also TQM and service quality is positive and significant.*

Key words: *TQM (total quality management), market orientation, services quality, customer's satisfaction, private insurance companies.*

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INTRODUCTION

The current era is a rapid and unpredictable period and its managerial difficulties and problems are too complex as we could not be able to solve them easily. In this regard, a new type of management as total quality management is accepted as an effective method in order to improve organizational capabilities. This type of management needs to change of managerial method. This procedure is trying to create responsibilities and abilities in all levels for making decisions and it demands motivation among personnel. But all organizational issues are not related to managerial subject. As we can say that the most important and critical pulse of each organization is its customers which they could not be separated from the organization and their satisfaction would increase the financial and competitive abilities in an organization. This issue could be as key part for obtaining satisfaction, market-oriented in an organization and their service qualities. So as expected, total quality management (TQM) would effect on market- orientation and the quality of services that we will investigate them in this study.

RESEARCH PURPOSES

Both Total quality management (TQM) and market-orientation are emphasized on customer's needs and customer's participation and the final goal of both of them are the customer's satisfaction. Litton (2001)[1] proposed that all Total quality management (TQM) methods could provide a rich set of needed tools that companies can use of them in order to inverting into market-oriented company. Soconsidered synergistic relationship between quality and competent marketing concepts attract our attention to the analyzing total quality management (TQM) and market-orientation. (Litton, 2001)

On the other hand, total quality management (TQM) needs continuous improving in order to achieve innovation and satisfy the customers. Because implementing total quality management (TQM) would be caused that the company could provide real needs and customer's expectations. Total quality management (TQM) is interrelated with service quality and could help to them. (Silvestro 1998)[2]. So in this study we are following the relationship between total quality management (TQM), market- orientation and service quality.

Theoretical Research Framework

Many studies have been done in the field of total quality management (TQM), market-orientation and service quality in the domestic and international level. So we will point out to some of these searches as follow:

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[1]   Litton
[2]   Silvestro

Total Quality Management (TQM)

Total quality management is an effective effort for organizations that are intended to improve structures, styles, behaviors and even infrastructures due to attaining customer's satisfaction with maintaining compatibility, quality improvement and organizational competition. (zairi 1996)[3]

Also total quality management (TQM) is an intelligent , calm and steady method with synergistic effect in order to provide organizational purposes which finally could achieve to customer's satisfaction, increasing efficiency and enhance competitiveness. (Jafari and *et al*, 2005)

In order to meet the needs of other organizations and by considering to rapid change in the market and competitor's effort for achieving to organizational excellence , it is needed that the companies use some patterns for evaluating current situations and determining strength and weakness based on correct principles for strategic planning. For this reason, because of an extensive efforts which are done via some considerable experts in the field of quality and productivity , till now some different patterns are created by the title of national quality or superior organizational models after the second world war in Japan or some patterns with a bit delay between 1980-1990 in the America and Europe and other countries and these patterns are one of the common methods in order to obtaining mentioned purposes. (Razani, 2003)

Best models are as following: Deming Model, Malcolm Baldrige model, Europe quality award.

DEMING MODEL

The most superior ward of quality improvement in Japan is "Deming" award. This prize is designed and proposed on the year of 1951 by scientists and engineers council for appreciating of Doctor Edward for his efforts in the field of quality.

MALCOLEM BALDRIGE MODEL

As following studies which have been done in America Commercial ministry about the reasons of Japan's success rather than America, America quality national prize has been provided and by considering to the Malcolem Baldrige's role in providing this award, it is named as quality national award of Malcolem Baldrige.

EUROPE QUALITY AWARD MODEL

In the year of 1988, fourteen European large companies have agreed in order to creating and providing an award in the European level based on background principles for arriving to successes within organizations. This framework has

been considered fast in Europe and other countries and now it is as the most usable model in the global level. (Azar and Safari 2005)

The aim of this organization is motivating and as necessary helping to the management in order to accept and applying total quality management principles and also improving competitiveness in European industries. (Ashrafi Majd, 2004)

There are 9 fields which are considered in this model that five of them are related to some approaches that can create needed capabilities in the organization and because of this reason, they are named as "enabler" and four of them are considered to result evaluating and applying these approaches which they are named as "results". (Azar and Safari 2005)

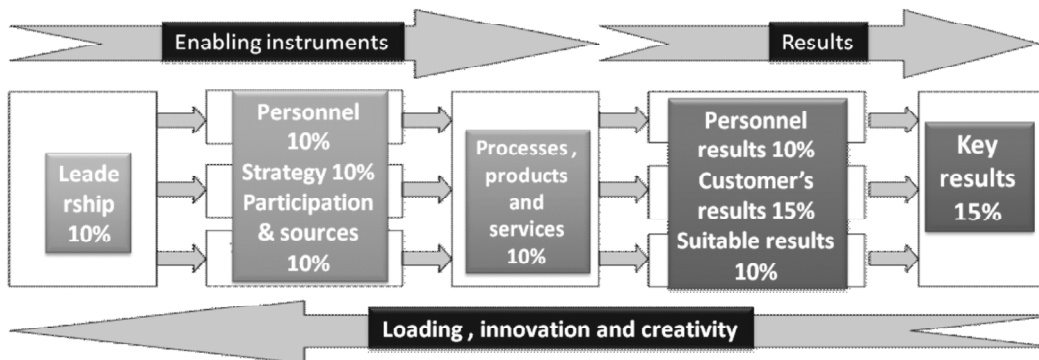The framework of this model is provided in the figure 1:

Figure 1: The Framework of Superiority Model of European Performance
(Najmi, 2013, page 39)

MARKET ORIENTATION

Market orientation is a type of behavioral norms which are extended within the organization and is responding now and future customer and market needs via innovation. Market orientation is a scale that help to personnel till to collect information from their customers, competitors and homogenous industries. In addition of if, it can cover all value added recognitions in any active fields.

(Dabne 2008)[3]

Kohli and Jaworski[4] in the year of 1990, have defined the market orientation concept from behavioral aspect as an element for making awareness about the market due to predicting now and future customer's needs. This element by the aim of distributing this approach is extended in all organizational units. Also Narver and Slater (1990)[4] defined market-oriented from cultural view as an organizational culture which can deal with behaviors effectively and it is needed

for value added for customers and it could improve commercial performance of the company as necessary. They are believed that market- oriented is included three elements:

Customer-orientation, competitor-orientation and inter functional coordination.

(Narver and Slater 1990)

CUSTOMER-ORIENTATION

Customer-oriented is included activities in order to recognize buyer's aim and effort due to creating values as more which it is the heart of market-oriented. (Narver and Slater, 1990)

Dawes is believed that customer-oriented is included two parts as customer's analysis and customer's response.

COMPETITOR-ORIENTATION

Dawes has defined competitor-oriented as the source for determining the strength and weakness points, competitor's strategies which we could response against their activities.

INTER FUNCTIONAL COORDINATION

Tse and *et al.*[5] have defined inter functional coordination as informational publication which are related to the customers and competitors among all people in order to create a correct perspective based on customer's needs and wishes and planning due to overcome competition.

They expressed inter functional coordination in four parts, inter functional correlation in the strategy codification, sharing of the other organization units in sources, information publication among all units and the total unites coordination in order to create value for the customer. (Tse and *et al*l, 2003).

Thus, TQM and market-orientation try to resolve the customer's needs and to attract their satisfaction. But we should pay attention that weather TQM can positively influence on the organization market orientation?

Hence, we will study this effect.

First main hypothesis: TQM has significant effect on the market orientation.

First sub-hypothesis: TQM has significant effect on the customer orientation.

Second sub-hypothesis: TQM has significant effect on the competitor orientation.

Third sub-hypothesis: TQM has significant effect on the inter functional coordination.

The quality of services

The quality concept is explained by different methods, feigenbaum[1] has defined it as a realization of the value; korazbi has defined it as adaptation with requirements; and parasuraman and *et al*[2] have defined the quality as break among the customer's expectations of the services and the customer's realization of the real operation that are received from the services provider's (Parasuraman and *et al*, 1985; sive yang lam and *et al*, 2012).

Thus, the services quality would be defined based on the customer's satisfaction as present difference among the customer's expectations or desires and his/her realization of the real performance of services (kawoosi and *et al*, 1384).

Parasuraman Model

Parasuraman and *et al* have presented several factors for measuring quality of services. A primary model that was presented by parasuraman in 1985, is shown in figure 2. These researchers efforts are a basis for next researches.
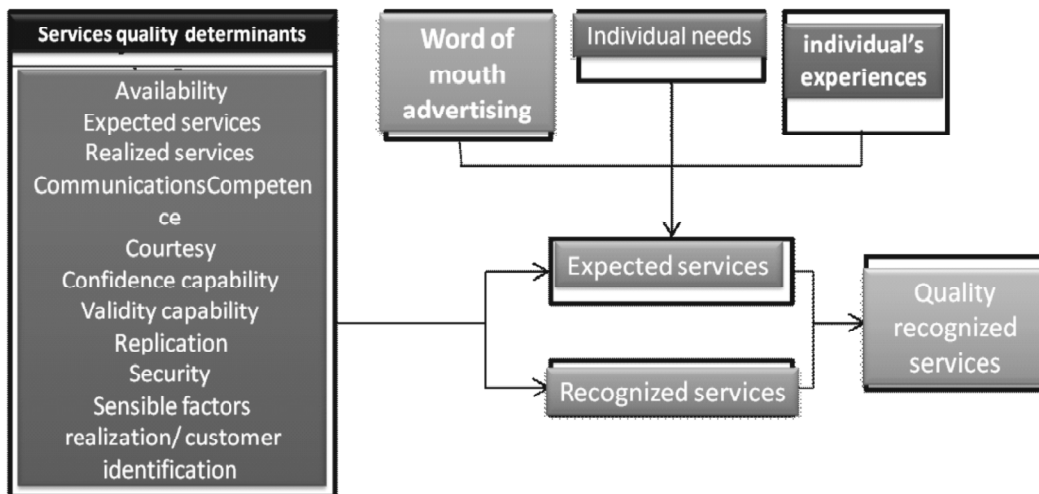

Figure 2: Services Quality Determinants (Tayebi Nia 2009)

These researchers found mighty correlation in their next studies among communications, competence, courtesy, confidence capability and security and also availability and realization. Therefore, they combined them as a general two dimensions of the confidence and intimacy.

Thus, they had implemented the quintuple dimensions of the intimacy, confidence, replication a instrument for measuring the services quality that is famous as serokoal model. (Tayebinia, 1387).

Serokoal Model

In order to evaluate the service quality, serokoal model developed as one of the most extensive of the functional models to determine the services quality by using space between the customer expectations and conceptions about the organization services quality operation. This modeltries to show the organization major activities that effect on conceptions of the quality.

Servokoal model measures the customer's expectations of their relation and services around the quintuple dimensions. Hidden structure instrument base is so appropriate to collect the services quality in common part. This instrument provides information about the customer's realizations about the services to governmental managers and related decision-makers with who they found what are the customer's expectations and needs. Thus, servokal instrument is applicable for different groups of customers and it could be give an equal services to them. (Alvani and Ryahi, 1382).

And due to this point that servokal is one of the most points and one of the forwarding methods for measuring the quality of services. (parasuraman and *et al* 1985). The research takes benefit from this model for measuring the services quality. This method is classified based on five physical dimensions, confidence ,capability, replication, and durance and intimacy.

Since the general quality management implementation makes to meet the customer's expectations and needs, this problem is introduced wither TQM positively effects on the services quality in the organization? Thus, we will study this effect.

The Second main hypothesis:

TQM has significant effect on the services quality.

The fourth secondary hypothesis: TQM has significant effect on the physical dimension.

The fifth secondary hypothesis: TQM has significant effect on the reliability.

Sixth secondary hypothesis: TQM has significant effect on the replication dimension.

Seventh secondary hypothesis: TQM has significant effect on the assurance dimension.

Eighth secondary hypothesis: TQM has significant effect on the intimacy dimension.

CONCEPTUAL RESEARCH MODEL
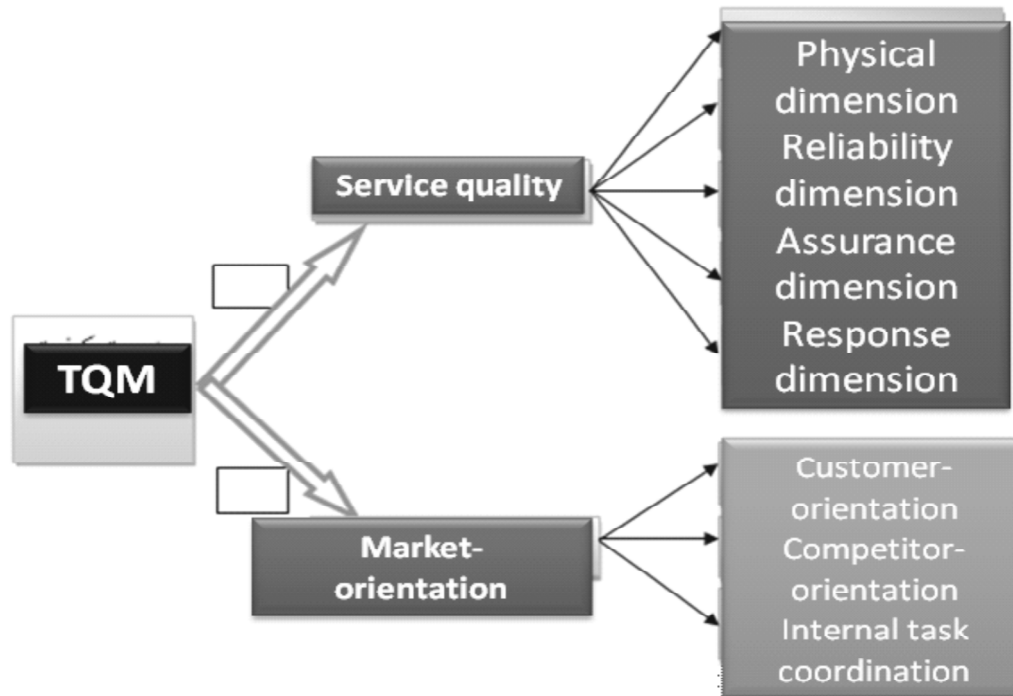
Research Method

Scientific studies are divided into three groups based on the research's aim:

Fundamental research, applicable and research & development method. (Bazargan and *et al* 2005) Current study is aimed to investigate "the relationship between TQM and market orientation, quality of services in the insurance industry" (case study: private insurance centers in Isfahan) and this study from aim's view is an applicable research, the current research is a non-experimental and descriptive research in regard to collect data and information and analysis method that researcher try to respond a real question and problem during a research process that exists in practice and it is a scaling type at implementation style.

Information Collection Instrument and Method

Information is collected in a subject research literature and the cortical bases context by library sources, articles, necessity books and also information universal network and questionnaire is used to analyze in regard to collect information and data that the questionnaire includes three parts. First questionnaire part is

included a brief exploration about the questionnaire to make more explicitly responders, second questionnaire part includes personal information that consists of seven questions about the responders administrative post, services years, employment type, educations level, age, married status, sexuality.

The third part includes questions related to study relationship among services quality, market orientation and TQM variables. Questionnaire is designed as closed in third part. In order to respond to questions of third part, likret scale is utilized, thus, for each question is used 5 choice.

Questionnaires Reliability & Justifiability

However above questionnaires are standard but for much more confidence, we will determine its reliability and confidence capability.

Validity

Validity is a test (instrument) and usually is determined by expert individuals about the study subject. In this step, questionnaire is designed by implementing experts test, consulting with the respected supervisors, advisors and also expert's views about insurance.

Reliability

In this research, cronbach's alpha method is utilized in regard to determine the test confidence capability. As a results, first questionnaire was distributed and collected accidentally among 30 people of the researched individuals and then cronbach's alpha is obtained by helping statistical software SPSS. This number shows wither the used questionnaire is confidence capability and on the other words, is necessary reliability or not. Table1 shows cronbache's alpha's variables. Total cronbach's alpha was obtained by that questionnaire and it is 0/952.

SOCIETY AND STATISTICAL SAMPLE & SAMPLING METHOD

the current research statistical society includes total personnel, deputies, Isfahan private insurance branch's chairmen that all of them are 408 people and sample people numbers are 198 in a sample volume formula among branch's personal, deputies and chairman.

In order to determine the low volume of necessary sample, Cokran equation for limited society is used as follow:

$$n = \frac{Nz^{\gamma}\alpha\lambda(1-p)}{(N-1)d^{\gamma} + Z^{\gamma}\alpha\lambda(1-p)}$$

Table 1
Cronbach's Alpha Variables

Cronbach's alpha	question number	Variable
۸٪٫	۴–۱	Leadership
۸۴٪٫	۸–۵	Strategy
۸٫۴٫	۱۲–۹	Personnel
۷۷٪٫	۱۶–۱۳	Participation
۷۵٪٫	۲۰–۱۷	Process and services & goods
۷۶٪٫	۲۴–۲۱	Customer's results
۸۴٪٫	۲۸–۲۵	Personnel's results
۸۲٪٫	۳۲–۲۹	Society results
۸۴٪٫	۳۶–۳۳	Key results
۹۳٪٫		TQM
۸۴٪٫	۴۰–۳۷	Customer orientation
۷۹٪٫	۴۴–۴۱	Competitor orientation
۸۵٪٫	۴۸–۴۵	Inter functional coordination
۹۲٪٫		Market orientation
۷۰٪٫	۵۲–۴۹	Physical dimension
۷۲٪٫	۵۶–۵۳	Confidence capability dimension
۸۳٪٫	۶۰–۵۷	Replication dimension
۸۲٪٫	۶۴–۶۱	Assurance dimension
۸۵٪٫		Intimacy dimension
۹٫۴٫		Services quality
۹۵۴٫		Total

To determine minimum neccessary volume sample, it is assumed that society people are relative homogeneity and similarity; But it always is not that society people are homogeneity and similarity; therefore, They can divide specific sub group and sub part which are of inter group homogeneity. In this societies useing of the simple accidental method is not suitable, because it is possible that all or most sample people are selected from one group or sort and so, it would not be as the total society reference, for resolving this problem in selecting sample people, classification method is utilized; that is society people are divided a different category due to its inter group attributes and sample people are selected at proportion from among whole classes (Hafez nia, 1389).

This research also tried to choose a sample as is society reference. Therefore, we used the classified sampling method and each insurance company defined as one class and a sample number of each class specified at its personnel number related to total society and our questionnaire distribution performed in two steps because of lack of participation of two insurance companies all distributed questionnaires were returned with collaboration directors.

DATA ANALYSIS METHOD

In current research, it is utilized two conventional and famous statistical methods in the society researches for collecting data analysis. Thus, it is performed data processing in two levels of the descriptive statistics[1] and inferential statistics[2] after collection and extraction. In descriptive study, the collected data and information are studied that are related to demographic and individual's features and the produced results are presented in graph and tables format. In next part (inferential statistics)this issue is studied by research hypothesizeswith utilizing normal tests, regression tests, variation analysis, fridman test, structural equations. After a research main- structural equation model test, pathways standard coefficients are as follow (figure 4).
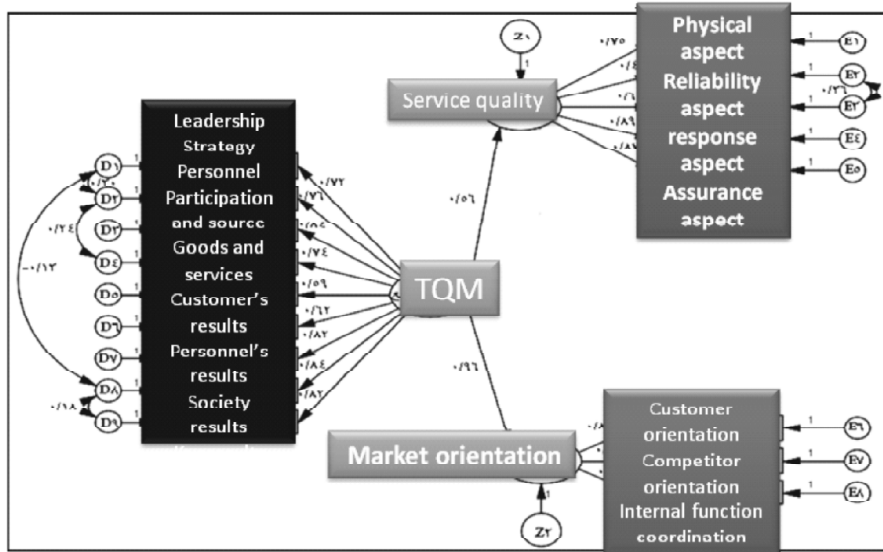

Figure 4: Coefficients of Main Model

The significant relationship among model elements and also path coefficients in the table 2 are shown.

Table 2
Path Coefficient of Main Model of Research

Result	P	Critical rate	Standard error	standard coefficient	Hypothesis	
Approved	***	11.386	0.097	0.960	H1	market orientation- TQM
Approved	0.023	2.266	0.091		H2	Service quality- TQM

The above table shows the paths among TQM and market orientation variables that they have a significant relationship with each other. Because significant criterion of this path is less than 0.05 and their confident level is 95%. some important indexes of this model are shown in the Table 3.

Model 1	Index	Type of index
51	NPAR	
1.2	DF	
0.083	P more than 0.05	
122.301	CMIN (Chi Square)	Absolute
0.903	AGFI more than 0.9	
0.935	GFI more than 0.9	
0.988	TLI more than 0.9	Compatibility or relatively
0.947	NFI more than 0.9	
0.991	CFI more than 0.9	
0.711	PNFI more than 0.9	Purposes
0.743	PCFI more than 0.9	
0.0032	RMSEA less than 0.08	
1.199	CMIN/DF less than 5	

Test secondary hypothesizes of research based on linear regression test's results

	Standardized coefficients			Non standardized coefficients		
Results	p	t	B	Istandard Error	B	Model
Approve first hypothesis	.000	18.219	.793	.054	.993	TQM "depended variable: customer orientation"
Approve second hypothesis	.000	17.546	.782	.055	.958	TQM "depended variable: competitor orientation"
Approve third hypothesis	.000	15.868	.750	.058	.921	TQM "depended variable/internal function coordination"
Approve fourth hypothesis	.000	7.177	.456	.061	.437	TQM" depended variable" physical aspect"
Approve fifth hypothesis	.000	4.525	.308	.061	.277	TQM: depended variable" reliability
Approve sixth hypothesis	.000	5.975	.393	.070	.417	TQM: depended variable: response
Approve seventh hypothesis	.000	7.520	.473	.076	.571	TQM: depended variable: assurance aspect
Approve eighth hypothesis	.000	7.683	.481	.077	.595	TQM : depended variable/empathy aspect

Results of Table 4 Show that TQM respectively have a significant effect on customer's orientation, competitor orientation, inter functional coordination, physical , reliability, response, assurance, empathy as Beta standard coefficients 0.793, 0.782, 0.750, 0.456, 0.308, 0.393, 0.473, 0.4781 and their regression test is less than 5%. So all secondary assumption are approved.

RESULTS OF RESEARCH HYPOTHESIS ANALYZING

First Main Hypothesis

Total quality management has significant effect on the market orientation of Isfahan private insurance companies.

Findings related to first research basic hypothesis shown that TQM variable has significant and positive effect with 0/960 standard coefficient on the market orientation due to $p \leq 0/001$ meaningful level. Then it can state that first hypothesis is approved and TQM operation in insurance companies lead to increase the market orientation in them.

Based on the yield results, the insurance companies managers should attempt to implement as more effect as TQM to can obtain such market pulse with the organization oriented market.

Regression test results among TQM, customer orientation variables, competitor orientation and inter functional coordination show that TQM with Beta standard coefficient 0/793, 0/782, 0/750, respectively has positive effect on the customer orientation, the competitor orientation and inter-functional coordination. Therefore, it can express that first up to third sub-hypothesizer are approved.

Due to TQM is formed nine parts (leadership, strategy, personnel, sources and companies, processes, services and products, customers results, personnel results and key results) according to Europe quality prize model, it can affect as widespread in all organization levels and first this system correct implementation in an organization needs an appropriate organization culture and to follow it attracts the organization leaderships and managers specific attention and due to this system specially attends the customers discussion and their results, it can be so effective in the organization oriented customer and also regarding to the competitors strategies and the society results can be had right and positive influence on the organization competitor organization and also this system emphasis on personnel and their results and sources and partnerships about inter part coordination can so be helped for the organization. Therefore, it can prove TQM positive effect reason on the market orientation and it cannot be accidental.

Second basic hypothesis:

TQM has significant effect on Isfahan private insurance companies services quality.

According result, 0/023 meaningful level expresses that TQM has meaningful effect on services quality and due to $p < 0/05$; that is, TQM has meaningful and positive effect with 0/25 standard coefficient on the services quality.

Hence, it can state that second hypothesis has been approved. Due to the yield results, the insurance companies managers should make an effort for more implementation total quality management, than can increase the organization services quality and to utilize of its advantages.

Regression tests results among to take quality management, physical dimension variables, confidence capability dimension. Replication dimension, assurance dimension, and intimacy dimension show that TQM with Beta standard coefficient 0/456, 0/308, 0/393, 0/473, 0/481, receptivity has positive effect on physical dimension, confidence capability dimension, replication dimension, assurance dimension, and intimacy dimension. Hence, it can state that fourth to eight sub-hypothesizes are approved.

As TQM indicates that this system try to implement the quality in all organizational levels; wither this organization is a service or a generative. However, this system so closely with the services quality In order to the organizations with the quality dimensions individual (physical dimension, confidence capability dimension, replication dimension, assurance dimension and intimacy dimension) and in fact it try to implement the services quality in all organizational levels by the helping leaderships and personnel and it puts as correct and comprehensive in the society and customers authority. Thus, it can prove TQM positive effect on the services quality.

GENERAL AND APPLICABLE CONCLUSION

Insurance companies first should try, to enclose such deigns with personnel and related responsible and give the needed information to them. In fact they should implement participating managerial style. Also they should continue their working with strategies bases on now and future needs and wishes of customers and sometimes it is necessary they try to recognize even hidden needs via effective conversation as formal or informal. So psychological researches should give different sale reports and they should try to provide customer's needs and help to senior managers and personnel in order to recognizing changeable customer's needs despite of competitors activities and they would analyze their competition strategies.

They should try to distribute the obtained information of the customers poll results in the various part of organization. Units than TQM simultaneous can implement in the organization and also help to increase the organization market orientation. They try to upgrade to the extent possible its own services quality by using appropriate sources and using worthy and skillful personnel and with helping and guiding of the respected deputies and managers, and this enterprise is not possible; unless the organization worthy personal help and to accompany and they participate in the organization decision making and also in insistently and sympathetic implantation. They try to utilize the proper equipment and facilities from administrative building and enough facilities in available location by using available sources and by helping stakeholders and commercial partners and in this way, they try to attract the customer's satisfaction in terms of tangibles, they should meet the promised needs and to accomplish correctly rules and provisions by assessment on time and continuous services, and they ensure about the organization and managers capabilities in managing critical conditions and also about the personnel accuracy and honesty and hence they try to train continuous because of notifying personnel about new subjects and discussions which cause to answers and to sympathize them about the customers difficulties and problems.

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