

## Implementation barrier of ISO 9001 with in service and manufacturing organizations in Pakistan

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**Abstract :** *The ISO 9001 standards were developed to achieve the customer satisfaction. The ISO 9001 standard is the most popular standard of quality management system around the world wide organizations. The purpose of this research study is to evaluate the diverse barriers that impede implementation of ISO 9001 within service and manufacturing industries in Pakistan through an empirical study. To conduct this study a long literature review was carried out and relevant information has been collected to collect the data. In order to conduct this study a questionnaire was the main research instrument. This research has been starting with a questionnaire which is same for service and manufacturing industries and designed on online “Google form application software”. This questionnaire was distributed in service and manufacturing industries within Pakistan.*

*Systematically the result of response were collected from Google drive sheet and analysis of the survey revealed that main barriers for implementing ISO 9001 are an absence of understanding the advantages of ISO 9001 confirmation, lack of involvement and empowerment of employees, lack of reward and motivation system, ineffective performance measurement system, lack of focus to implement PDCA (Plan/Do/Check/Act) cycle for continuous improvement, and lack of decision making on the base of collected data while the average of average responses shows that the most critical principle of quality management system are leadership and involvement of people.*

**Keywords:** *Barriers, Customer Satisfaction, ISO 9001 Standard, PDCA, Quality Management System*

### I. Introduction

The purpose of this study is to evaluate the implementation barriers of ISO 9001:2008 for ISO certification which can help to plan and implement quality management system according to the 9000 standard most successfully. The main purpose of this study is to collect data on the basis of barriers which found in implementing ISO 9001:2008 and analyze it for service and manufacturing industries within Pakistan.

Over the last decade, working sectors in Pakistan have high motivations to go with the implementation of available quality management system standards. The one that is most successful standard for organization growth, development and success is ISO 9001:2008. The implementation issues of ISO 9001:2008 have been explored in many countries but almost no research work has been done in Pakistan for service and manufacturing industries. Therefore to conduct an empirical study that will be valuable and consider the shed of light on this area. So the main purpose of this study is to explore the barriers for the implementation of ISO 9001:2008 within service and manufacturing organization.

The acronym "ISO" is derived from the Greek word "isos" which means "equal". There is a misconception about ISO that it is an abbreviation of three long words “international organization for standards” which is logically be not possible and it is more close to IOS. International organization for standards is basically the international authority which is responsible to issue all standards. ISO 9001 is the standard of quality management system among ISO standards. Quality management system is the set of interrelated process designed to meet the customer demand.

ISO 1987	
ISO 9000	1. Standards of quality assurance and management for selection and use
ISO 9001	2. Model of quality system for quality assurance which include design, installation, development, production and servicing process in organization.
ISO 9002	3. Model of quality system for quality assurance which include installation and production process in organization but not the design and development processes.
ISO 9003	4. Model of quality system for quality assurance which include process of testing and final inspection to meet the product and service quality requirement in organization.
ISO 9004	Provide guideline of quality management and quality systems.
ISO 8402	Provide the basic terminology and vocabulary
ISO 1994	
ISO 9000,9001,9002,9003,9004,8402	
The focus of these standards is on quality assurance by using preventive maintenance.	

ISO 2000	
ISO 9000	Fundamentals of quality management system and vocabulary defines terminology
ISO 9001	Combines ISO 9001,9002,9003into one standard.ISO 9001quality management system requirement use to asses compliance against requirements.
ISO 9004	Provide guideline of quality management system for performance improvement and continual management system improvements
ISO 2008	
Includes some classification in existing requirements of the previous issues to improve its consistency with ISO 14001:2004.	

## II. Research Question

1. What are the most important barriers affecting the implementation of ISO 9001:2008 for the service and manufacturing organization of Pakistan.
2. How the barriers affect the implementation process of ISO 9001 standard in service and manufacturing organization in Pakistan?
3. What is the most critical barrier to implement the principle of customer focus?
4. What is the most critical barrier to implement the principle of leadership?
5. What is the most critical barrier to implement the principle of involvement of people?
6. What is the most critical barrier to implement the principle of process approach?
7. What is the most critical barrier to implement the principle of system approach to management?
8. What is the most critical barrier to implement the principle of continual improvement?
9. What is the most critical barrier to implement the principle of factual approach to decision making?
10. What is the most critical barrier to implement the principle of mutually beneficial supplier relationship?
11. What are the major barriers for the implementation of ISO 9001 standard for manufacturing organizations?
12. What are the major barriers for the implementation of ISO 9001 standard for service organization?
13. Which is the most critical principle to implement the quality management system?

## III. Literature Review

Literature review enables the researcher to discover the barriers which is face by the organization during the certification process of ISO 9001standard that will help in developing the conceptual framework of this research.

### 3.1. Total Quality Management:

The historical evolution of Total Quality Management has taken place in four stages.

They can be categorized as follows:

- 1) Quality inspection
- 2) Quality control
- 3) Quality assurance
- 4) Total Quality Management.

In 1910s the first stage can be seen when Ford Motor Company's 'T' Model car rolled off the production line. The team of inspectors employ by the company to compare the product with the project standard. The purpose of this inspection was to find out poor quality product and separated from the acceptable level of quality product and then reworked, scrapped or sold as low quality. (Dahlgard, Kristensen, & Kanji, 1998).

The second stage of TQM development come with the advancement and quality was controlled by supervised skills, written specification, measurement and standardization. During the Second World War quality is verified by inspection instead of workers themselves because manufacturing process become complex. The concept of separate out the good product from bad product developed. At this stage Shewhart introduce the idea of quality control.

Inspection and quality control are the main processes which can help to meet the quality of product and services as per customer needs and lower the degree of non conformance.

The third stage of TQM development is the quality assurance which provides assurance of service or product quality as per customer need and it also contains previous stages. This stage was also included quality manual, use of cost of quality, control of process development and auditing of quality system.

The fourth stage of this development includes the concept, implementation and understanding of quality management principles in every function of business activities. Total quality management (TQM) addressed that the ideology of quality management must be applied at every stage, every level and every function of the organization.

TQM defined the quality in the following ways:

1. Quality means to continuously satisfy the customer's requirements.
2. Total quality is to achieve the quality at minimum cost.
3. Total quality management is to achieve the total quality through the involvement of everybody's.

TQM is characterized by five principles:

1. Management commitment
2. Focus on customer and employees
3. Focus on facts
4. Continuous improvement i.e. KAIZEN
5. Involvement of everybody's

### **3.2. Quality Management System:**

Continual improvement is achieved by means of the process orientation approach of standard. The root of this process is inextricably wound into the QMS definition. The characteristic of quality management system with respect to quality include following: **(Schlickman, 2003 #5)**

- 1) The establishment of policy and objective in order to manage resources by an organization.
- 2) The assignment of authorities and responsibilities to personnel.
- 3) The development of organizational culture among personnel.

ISO 9000 defined the quality management system as "QMS is the part of organization management system and its focus to achieve the output related to the quality objective". A quality management system is a set of interconnected activities that accomplished and achieve organization objectives and policy which direct and control the organization with respect to fulfil the requirements by set of inherent characteristic **(Hoyle, 2012 #6)**.

Simply quality management system is defined as "The set of interrelated process that facilitates the organization to achieve its objective". Apparently From many years quality management system is supposed as a passive set of document but documents alone are not enough in order to achieve the effective result. So for the achievement of systematic results system need to comprised the dynamic process which include activities, behaviours, and resources together in right relationship and focus on achieving the objectives. Application of quality management system has a lot benefits some of them are customer satisfaction, improvement in product quality, improvement in productivity and reduction in cost. An effective quality management system implies the organization objectives cited into the quality policy of organization. QMS is based on the structured responsibilities of organization, resources and process. Quality management contain the team work, communication, leadership and improvement of customer satisfaction. Quality management imply the commitment of top management. Quality assurance is the degree of assurance of product quality provide to customer with the confidence that product contain correction and prevention from problem and leads to high quality.

Adoption of ISO 9001 certification by external pressure have provide the less benefits as compare to adoption by the internally motivation of organization. **(Wiele, 2001 #38)**

### **3.3. Principles of ISO 9000 Quality Management System**

There are eight fundamental principle of quality management system. These fundamental principles are the vital part in term of management review and preventive action of the ISO 9001 standard.

ISO 9001 standard uses the eight principles of quality management system: **(Tricker, 2006 #7)**.

- Which reflect best practice
- Which are imply to facilitate continual improvement of the business and its overall efficiency
- Which are capable of responding customer needs and expectations.

#### **3.3.1. Customer Focus**

Organization acquired the important information and inputs by understanding the customer needs and listening the 'voice of customer' in order to impel development programme. **(SINGHAL, 2012 #8)**. Juran institute conducted one survey of more than 200 largest American's companies in 1994 and found that top managers accepting this statement that "Maximizing customer satisfaction will maximize the profitability and market share". (Vavra, 2002 #9).

#### **3.3.2. Leadership**

Leader makes the direction and unity of purpose for the organization. They should create and maintain the internal environment in which people can become fully involved in achieving the organization objective. **(Tricker, 2006 #7)(SINGHAL, 2012 #15)**.

#### **3.3.3. Involvement of People**

Various activities are carried out in organization and all these activities are performed by the people of organization. Employees throughout the organization are the essence of organization. Ability of employees can be effectively used for the benefits of organization by enable their involvement (Tricker, 2006 #7)(SINGHAL, 2012 #15).

#### **3.3.4. Process Approach**

When the organization resources and their activities are manage in term of the effective process then its leads to an expected result effectively and efficiently. (Tricker, 2006 #7).

#### **3.3.5. System Approach to management**

In order to achieve the organization objectives efficiently and effectively, interrelated process should be clearly identify, understandable and managed into a system. (Tricker, 2006 #7).

#### **3.3.6. Continual Improvement**

ISO 9001:2008 QMS standard specially mentions 'continual improvement, as the requirement of the standard by which an organization needs to continually improve the effectiveness of the quality management system. Continual improvement of the organization overall performance should be a permanent objective of the organization .(Tricker, 2006 #7).

#### **3.3.7. Factual approach to decision making**

Stability and effectiveness of the quality management system when demonstrated by the data analysis then it supports to take effective decision for the growth of organization (SINGHAL, 2012 #15). Effective decisions are depends on the analysis of data and information (Tricker, 2006 #7).

#### **3.3.8. Mutually beneficial supplier relationship**

Organizations and their suppliers are mutually dependent. Mutually valuable relationship between organization and its supplier improves the ability of both to create value. (Tricker, 2006 #7)

### **3.4. Barriers to implement the ISO 9001 standard**

A barrier is defined as the "a problem, rule or situation, obstacle that prevents someone from doing something or that creates difficulty to implement". In order to discover the critical factors for effective implementation of quality management system it is necessary to identify the common barriers or limitation faced during the implementation process. There are numerous critical factors for the successful implementation of a QMS-ISO 9000 which is faced by many different organizations around the world and termed as a barriers/limitation or difficulties.

Literature review represents the numerous barriers for the implementation of ISO 9001 such as lack of customer satisfaction, deficiency in commitment of top management, leadership and involvement, insufficient quality awareness among people, absence of employee's involvement and empowerment, insufficient documentation, insufficient communication, deficiency in understanding of ISO standard and requirements, insufficient human resource, insufficient education and training programs, insufficient time, cost involvement, organization culture, lack of reward system, insufficient control and cooperation with supplier and deficiency in control on incoming material.

## **IV. Research Design And Methodology**

The section starts with a clarification on the philosophical foundation to the research, the research design and techniques for data collection. The main purpose of this study is to focus the implementation barrier individually in service and manufacturing as well as comparison of both type of organization. This study is depends on non-exploratory descriptive research design because of less control over variables and data gathered is also depends on response of respondents and lesser size of sample from across the board of population.

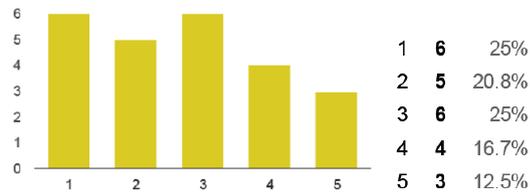
The qualitative research strategy has adopted in this project. Research question are designed according to the theory describe in literature review for the essential conclusion of the implementation barriers of ISO 9001 with in service and manufacuring organizations in Pakistan. For this purpose the primary data collected from various people relevant to different field within organizations. This research project has divided into two separate sections and consists of 46 research questionnaire. Question asked in research questionnaire linked with the research objective and methodology of the literature review.

In this research project questionnaire is used as a data collection instrument. Questionnaire is divided into structured or close form and unstructured or open ended form. In this project structured questionnaire are developed which consist of multiple question which is asked from respondents in order to achieve the reliable response. In this project questionnaire were designed by using five point likert scale. Likert scale is psychometric

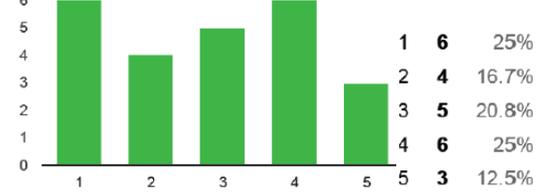
response scale basically utilized as a part of questionnaire to acquire preferences of respondents or level of concurrence with a statements or set of explanations. Likert scales are a non-comparative scaling system and are one-dimensional in nature. Respondents are solicited to show their level from concurrence with a given explanation by method for an ordinal scale. Respondent were asked to show their preferences from Strongly disagree=1, Disagree=2, Neutral= 3, Agree=4, and Strongly Agree=5

**4.1. Descriptive Result of Questionnaire:**

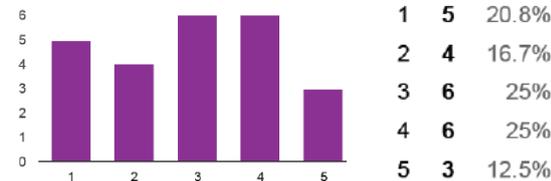
**Lack of concentration on customer requirement.**



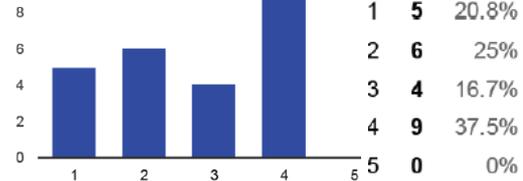
**Lack of customer feedback framework**



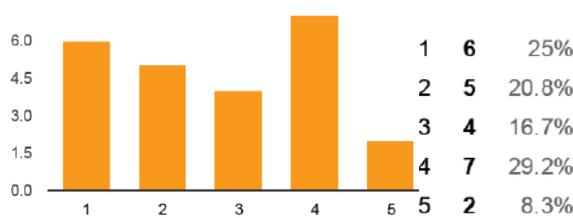
**Lack of focus on voice of customer**



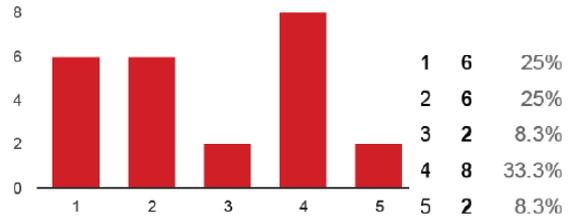
**Lack of cooperation from customer**



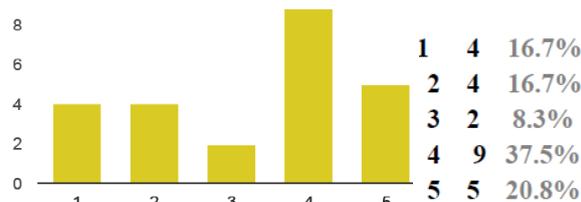
**Lack of positive attitude of customer towards quality.**



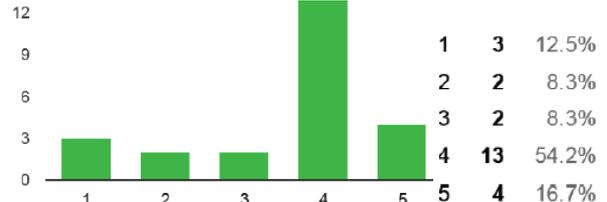
**Lack of focus to appreciate the principle of customer satisfaction in organization.**



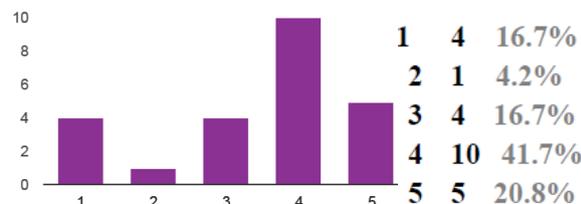
**Absence of understanding of the reason for the certification of ISO 9000 standard.**



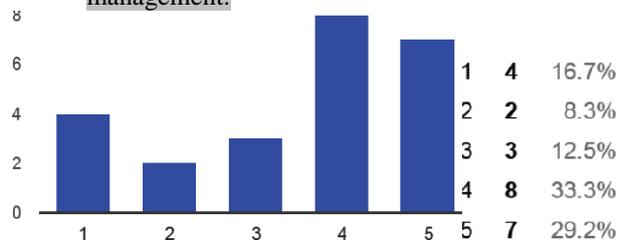
**Absence of understanding the advantage of ISO 9000 confirmation.**



**Absence of ISO 9000 awareness among employees.**



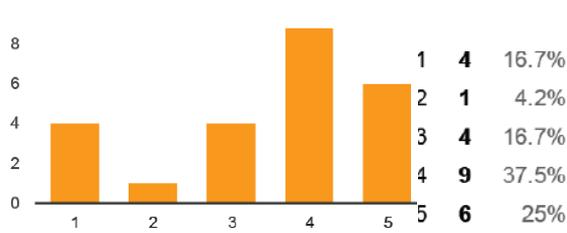
**Absence of commitment and support of top management.**



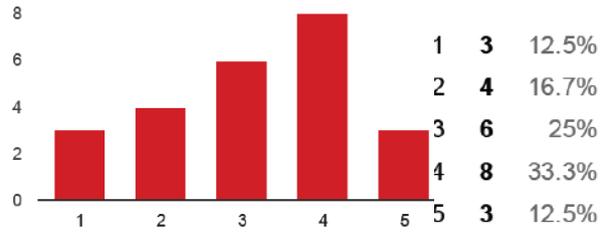
**Lack of leadership in organization.**

**Lack of management review periodically.**

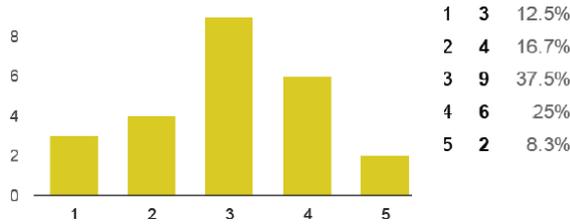
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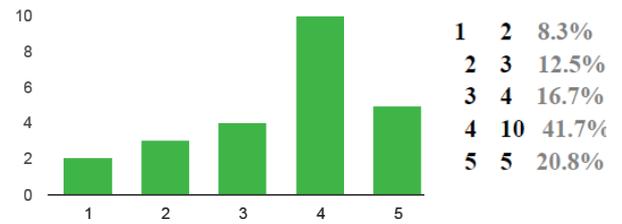
**Lack of recording the result of management review.**



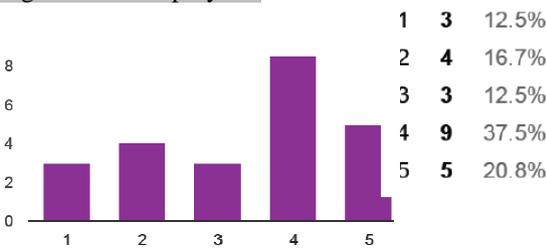
**Lack of involvement and empowerment of employees.**



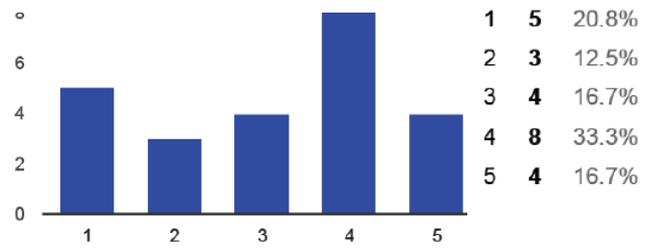
**Lack of education and training among the organization employees.**



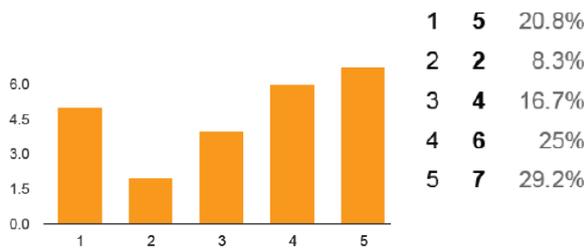
**Lack of commitment, involvement and cooperation from employees.**



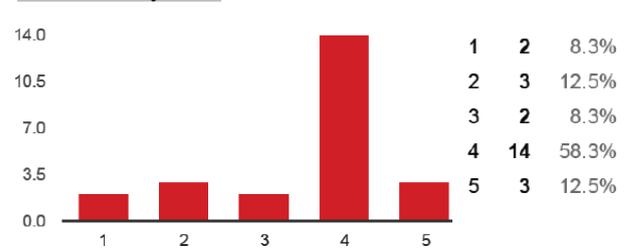
**Employs creates resistance to change of existing system of the organization.**



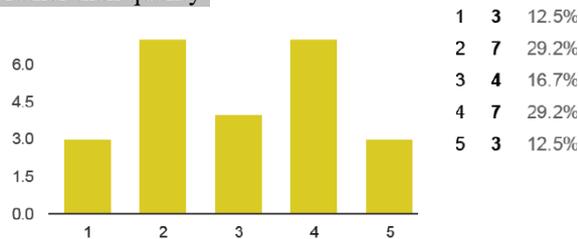
**The organization has the lack of reward and motivation system.**



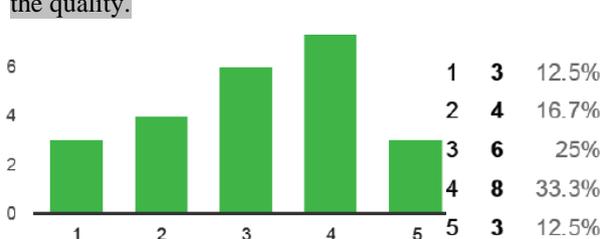
**Employees focus on their own benefits rather than quality.**



**Lack of positive attitude of employees found towards the quality.**

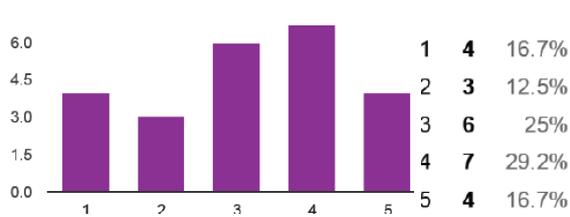


**Lack of proper framework to allocate the authority and responsibility to the personnel.**

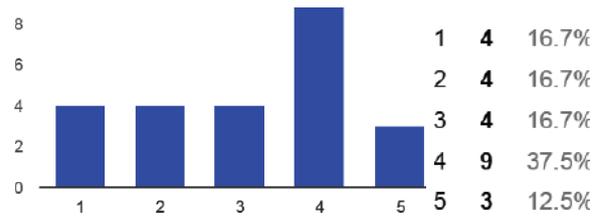


**Absence of team work between the internal departments.**

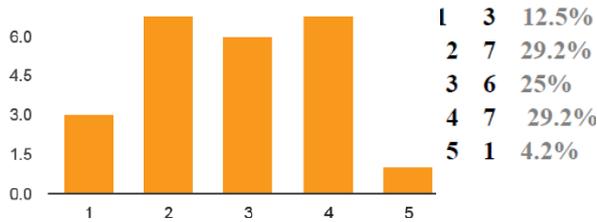
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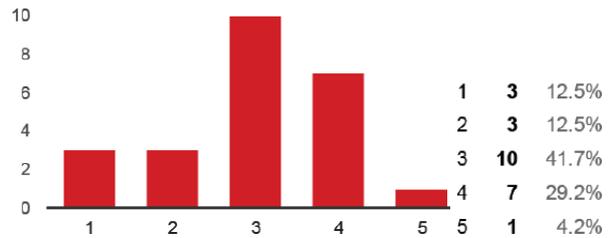
**There is an insufficient time.**



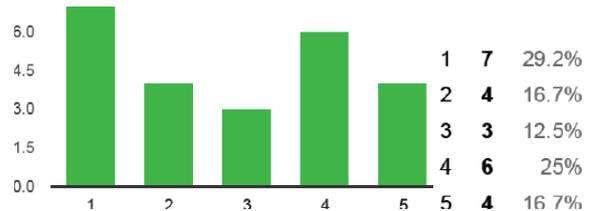
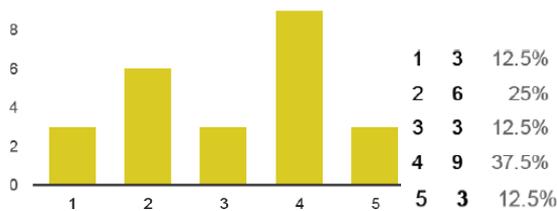
**Incapable correspondence between departments of organization.**



**Lack of cross-functional participation between the departments.**

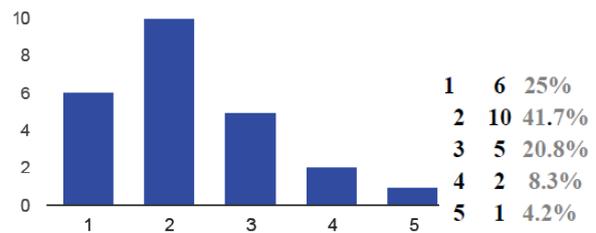
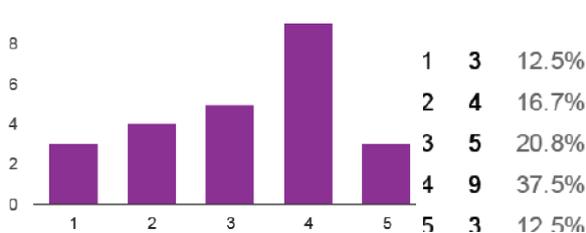


**Lack of qualified personnel in organization.**



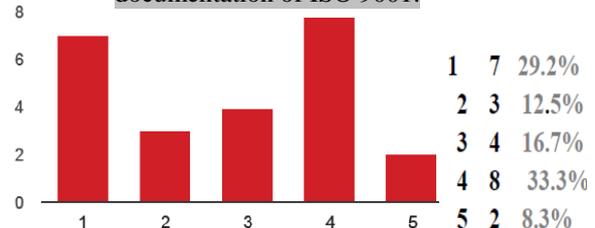
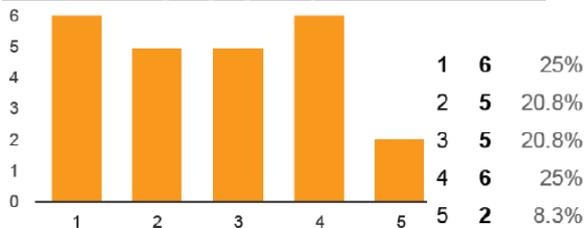
**There is ineffective performance measurement system.**

**Lack of technology and poor practices of quality management exist in organization.**



**Lack of developed proper organizational structure.**

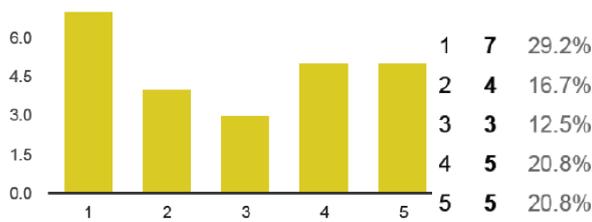
**There is difficult to developed and control documentation of ISO 9001.**



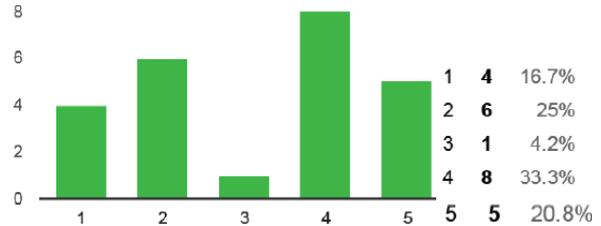
**Lack of interest to get certification of ISO 9001 due to high cost of registration consultant and auditing.**

**Lack of training programs for quality management system.**

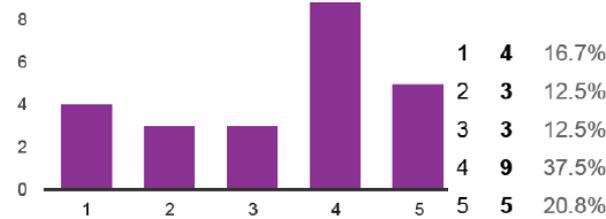
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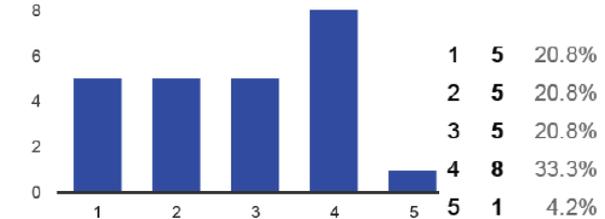
**Lack of focus to implementation PDCA (Plan/Do/Check/Act) cycle for continuous improvement.**



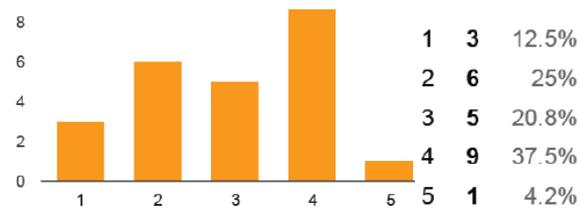
**It is difficult to implement the auditing system of ISO 9001 in organization.**



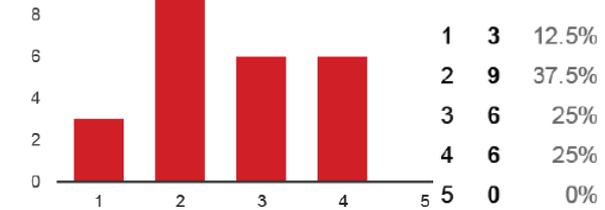
**Underestimate the efforts needed to control the documentation required during registration process.**



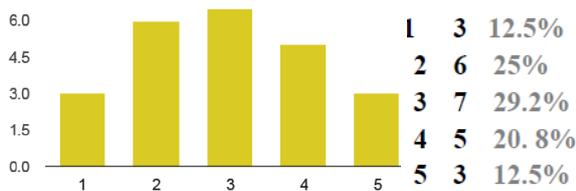
**Implementation of ISO 9001 is just increase of workload from quality management**



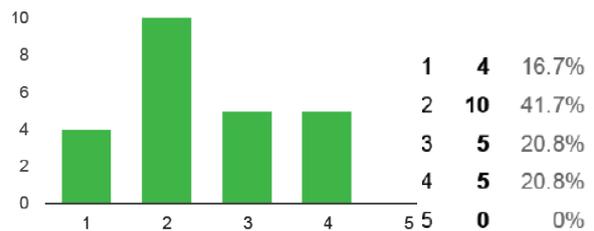
**Lack of methods and procedure to control the non conforming product.**



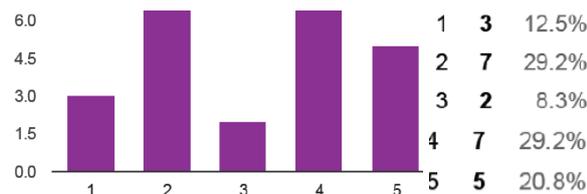
**Lack of assessment on incoming materials by supplier.**



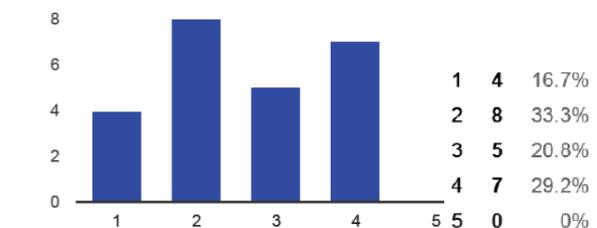
**Lack of decision making on the base of collected data.**



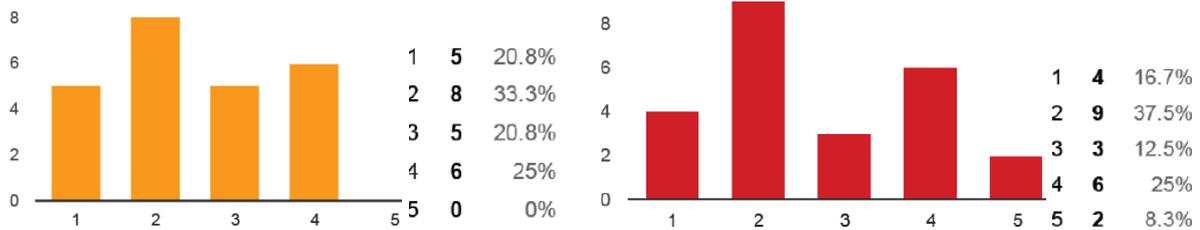
**Lack of control on supplier procedures.**



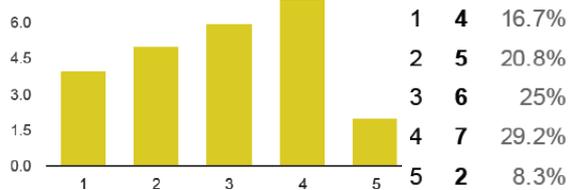
**There is a lack of supplier cooperation.**



**Lack of positive attitude of supplier found towards the quality.**



Lack of correspondence between the organization and its suppliers.



## V. Summary, Findings, Conclusion and Recommendations

### 5.1. Summary:

The main objective of this study was to descriptively analyse the implementation barriers of ISO 9001 within service and manufacturing industries of Pakistan. On the basis of eight principles of quality management system different types of barriers are identified from the literature review and a questionnaire was developed to collect the data from service and manufacturing industries of Pakistan. All the barriers of ISO 9001 have interrelated to eight principle of quality management system which also enables to identify most critical barriers for implementation of each principle. Moreover this study helps us to analyze most critical principles for both type of organizations and their comparison in order to effectively implementation of ISO 9001. Research objectives have developed on the basis of eight principle of quality management system which provides the understanding of the brief description of requirements, philosophies and theories defined in ISO 9001. In this perspective a comprehensive study has been conducted within Pakistan. An electronic mail survey has been designed for this purpose and distributed to respondents belongs to service and manufacturing organizations of Pakistan. Detail description of this study has been described in previous chapter and summary of average of average responses of service organization, manufacturing organization and their comparison represented the most critical principles for the implementation of ISO 9001 which has been shown in Table 4.

**Table 5.1: Summary of Average of Average Responses**

Sr.No	Principles of Quality Management	Average of Average Responses (Manufacturing)	Average of Average Responses (Service)	Average of Average Responses (Both Organizations)
01	Customer Focus	2.74	2.86	2.78
02	Leadership	3.34	3.34	3.35
03	Involvement of People	3.29	3.26	3.30
04	Process Approach	3.03	2.92	2.94
05	System Approach to management	2.96	2.62	2.75
06	Continual Improvement	3.27	2.90	3.04
07	Factual Approach to decision making	2.91	2.83	2.83
08	Mutually beneficial Supplier relationship	2.75	2.69	2.69

### 5.2. FINDINGS OF THE STUDY:

This part describes the finding obtained from the literature review and descriptive analysis of the data collected through questionnaire of electronic survey.

#### 5.2.1. Finding from Literature Review:

Consequent finding from the literature review of barriers to implement the ISO 9000 and principles of quality management system is support the objective of research project “Implementation barriers of ISO 9001 within service and manufacturing industries of Pakistan”. Literature review described the following objectives and questions in details:

- a) The detail discussion of Principles of Quality Management system provides the understanding of the brief description of requirement, philosophies and theories of ISO 9001 in an appropriate way.
- b) Table 2 in chapter 2 provides the details of common types of barriers that affect the implementation process of ISO 9001 for service and manufacturing organizations.
- c) The detail description of common types of barrier developed the understanding of common types of issues regarding the implementation around the quality management system.

### **5.2.2. Findings from Descriptive Analysis:**

ISO 9001 is based on a Quality Management System, hence the implementation of Quality Management System faced the various types of barriers which describe in detail by concluded the outcome from the descriptive analysis. Following are the list of critical barriers face by service and manufacturing organizations of Pakistan on the basis of descriptive analysis:

- a) There is an absence of understanding of the reason for the certification of ISO 9001 standard.
- b) There is an absence of understanding the advantages of ISO 9001 confirmation.
- c) Absence of ISO 9001 awareness among employees.
- d) Absence of commitment and support from top management.
- e) Lack of leadership in organization.
- f) There is lack of management review periodically.
- g) Lack of involvement and empowerment of employees.
- h) Lack of education and training among the organization employees.
- i) Lack of commitment, involvement and cooperation from employees.
- j) Employs creates resistance to change of existing system of the organization.
- k) The organization has the lack of reward and motivation system.
- l) Lack of positive attitude of employees found towards the quality.
- m) Lack of proper framework to allocate the authority and responsibility to the personnel.
- n) Absence of team work between the internal departments.
- o) Lack of cross-functional participation between the departments.
- p) There is ineffective performance measurement system.
- q) Lack of training programs for quality management system.
- r) Lack of focus to implementation PDCA (Plan/Do/Check/Act) cycle for continuous improvement.
- s) Lack of decision making on the base of collected data.

#### **5.2.2.1. Critical barrier for Customer Focus:**

There is no any critical barrier observed in descriptive analysis for customer focus.

#### **5.2.2.2. Critical barrier for Leadership:**

Descriptive result of barriers regarding leadership shows that the following barrier is most critical for both type of organization.

There is an absence of understanding the advantages of ISO 9001 confirmation.

#### **5.2.2.3. Critical barrier for Involvement of People:**

Descriptive result of barriers regarding involvement of people shows that the following barrier is most critical for both type of organization.

- a. Lack of involvement and empowerment of employees.
- b. The organization has the lack of reward and motivation system.

#### **5.2.2.4. Critical barrier for Process Approach:**

Descriptive result of barriers regarding process approach shows that the following barrier is most critical for both type of organization.

There is ineffective performance measurement system.

#### **5.2.2.5. Critical barrier for System Approach:**

There is no any critical barrier observed in descriptive analysis for customer focus.

#### **5.2.2.6. Critical barrier for Continual Improvement:**

Descriptive result of barriers regarding process approach shows that the following barrier is most critical for both type of organization.

Lack of focus to implementation PDCA (Plan/Do/Check/Act) cycle for continuous improvement.

**5.2.2.7. Critical barrier for Factual Approach to Decision Making:**

Descriptive result of barriers regarding process approach shows that the following barrier is most critical for both type of organization.

Lack of decision making on the base of collected data.

**5.2.2.8. Critical barrier for Mutually Beneficial Supplier Relationship:**

There is no any critical barrier observed in descriptive analysis for customer focus.

**5.2.3. Major barriers for Manufacturing Organization:**

- a) There is an absence of understanding of the reason for the certification of ISO 9001 standard.
- b) There is an absence of understanding the advantages of ISO 9001 confirmation.
- c) Absence of ISO 9001 awareness among employees.
- d) Absence of commitment and support from top management.
- e) Lack of leadership in organization.
- f) Lack of involvement and empowerment of employees.
- g) Lack of education and training among the organization employees.
- h) Lack of commitment, involvement and cooperation from employees.
- i) Employs creates resistance to change of existing system of the organization.
- j) The organization has the lack of reward and motivation system.
- k) Lack of positive attitude of employees found towards the quality.
- l) Lack of proper framework to allocate the authority and responsibility to the personnel.
- m) Absence of team work between the internal departments.
- n) Lack of cross-functional participation between the departments.
- o) There is ineffective performance measurement system.
- p) There is lack of developed proper organizational structure.
- q) Lack of interest to get certification of ISO 9001 due to high cost of registration consultant and auditing.
- r) Lack of training programs for quality management system.
- s) Lack of focus to implementation PDCA (Plan/Do/Check/Act) cycle for continuous improvement.
- t) It is difficult to implement the auditing system of ISO 9001 in organization.
- u) Underestimate the efforts needed to control the documentation required during registration process.
- v) Lack of methods and procedure to control the non conforming product.
- w) Lack of decision making on the base of collected data.
- x) Lack of positive attitude of supplier found towards the quality.

**5.2.4. Major barriers for Service Organization:**

- a) Lack of cooperation from customer.
- b) There is an absence of understanding the advantages of ISO 9001 confirmation.
- c) Absence of ISO 9001 awareness among employees.
- d) Absence of commitment and support from top management.
- e) Lack of leadership in organization.
- f) There is lack of management review periodically.
- g) There is a lack of recording the result of management review.
- h) Lack of involvement and empowerment of employees.
- i) Lack of education and training among the organization employees.
- j) Employs creates resistance to change of existing system of the organization.
- k) The organization has the lack of reward and motivation system.
- l) Employees focus on their own benefits rather than quality.
- m) Lack of positive attitude of employees found towards the quality.
- n) Lack of proper framework to allocate the authority and responsibility to the personnel.
- o) There is an insufficient time.
- p) Incapable correspondence between departments of organization.
- q) Lack of training programs for quality management system.
- r) Lack of focus to implementation PDCA (Plan/Do/Check/Act) cycle for Continuous improvement.
- s) Lack of decision making on the base of collected data.

**5.2.5. Critical Principle to Implement Quality Management System.**

As the average of average responses of descriptive analysis for quality management principles shown in table 4 which represents that the most critical principles for the implementation of ISO 9001 with in service and manufacturing organization are the “Leadership” and “Involvement of People”.

## **VI. Conclusion**

Descriptive analysis of barriers to implement ISO 9001 shows that the identified barriers for both service and manufacturing organizations of Pakistan are almost similar. Result of descriptive studies indicates that both type of organization in Pakistan face lots of barriers among them the most important are, an absence of understanding of the reason for the certification of ISO 9001 standard, an absence of understanding the advantages of ISO 9001 confirmation, absence of ISO 9001 awareness among employees, absence of commitment and support from top management, lack of leadership in organization, lack of management review periodically, lack of involvement and empowerment of employees, lack of education and training among the organization employees, lack of commitment, involvement and cooperation from employees, employs creates resistance to change of existing system of the organization, lack of reward and motivation system, lack of positive attitude of employees found towards the quality, lack of proper framework to allocate the authority and responsibility to the personnel, absence of team work between the internal departments, lack of cross-functional participation between the departments, ineffective performance measurement system, lack of training programs for quality management system, lack of focus to implementation PDCA (Plan/Do/Check/Act) cycle for continuous improvement, and lack of decision making on the base of collected data. Cumulative average result shows that among the eight principle of quality management system leadership and involvement of people is the most critical principle to effective implementation of ISO 9001. It has been observed that in Pakistani organizations it is necessary to enhance the importance of ISO 9001 and provide the awareness for the benefits of ISO 9001.

## **VII. Recommendation**

Abovementioned result of study showed that service and manufacturing organizations of Pakistan face lots of barriers to implement ISO 9001 because the concept of quality management system is not appropriately implemented within organizations. Service and manufacturing organization is suggested to provide the necessary training to their employees regarding the quality in order to effectively implement quality management system. Aforementioned study shows the list of barriers for service and manufacturing organization and their comparison and this study can be further extend to find out the ways to overcome these problems for service and manufacturing organizations of Pakistan. This study can be further extending on the topic of maintenance of ISO 9001 within service and manufacturing industries. This study has been conducted for service and manufacturing industries of Pakistan therefore further study can be required to extend this research for service and manufacturing industries of other countries.

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