

"The Study on Impact of ISO 9001 Quality Management System upon Work-Force Motivation"

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ABSTRACT

A motivated human resource can change course of any organization. As Human resource is the key resource for implementation of QMS, the study attempts to unveil the interconnection between ISO 9001 QMS implementation and workforce motivation. The responses were collected using structured questionnaire enabled with 5 point likert's scale. The formulated hypothesis has been tested using chi square test and one sample t test. Implementation of ISO 9001 improves communication between workers, managers and other departments, Quality initiatives are rewarded by higher management, employee is empowered to detect and solve organizations quality problems, employees develops sense of belonging towards organization, ISO 9000 enables organizations to pay better packages to its employees. The study has shown interlink age between implementation of ISO on Workforce Motivation.

Key Words: ISO: International Organization for Standardization, QMS: Quality Management System, Motivation.

INTRODUCTION

ISO 9001 is the international standard that specifies requirements for a quality management system (QMS). Organizations use the standard to demonstrate the ability to consistently provide products and services that meet customer and regulatory requirements. For exceling in any business organizations requires to be dedicated and dedication is not possible without motivation.

To make Quality products and services available to the customers cannot happen without Human Resource. A motivated human resource can change course of any organization. As Human resource is the key resource for implementation of QMS, the study attempts to unveil the interconnection between ISO 9001 QMS implementation and workforce motivation.

LITERATURE REVIEW

ISO 9001:2015 applies to any organization, regardless of size or industry. More than one million organizations from more than 160 countries have applied the ISO 9001 standard requirements to their quality management systems. Organizations of all types and sizes find that using the ISO 9001 standard helps them:

- Organize processes
- Improve the efficiency of processes
- Continually improve

ISO 9001 is based on the plan-do-check-act methodology and provides a process-oriented approach to documenting and reviewing the structure, responsibilities, and procedures required to achieve effective quality management in an organization. Specific sections of the standard contain information on topics such as:

- Requirements for a quality management system, including documented information, planning and determining process interactions
- Responsibilities of management



- Management of resources, including human resources and an organization's work environment
- Product realization, including the steps from design to delivery
- Measurement, analysis, and improvement of the QMS through activities like internal audits and corrective and preventive action

ISO 9001 helps organizations ensure their customers consistently receive high quality products and services, which in turn bring many benefits, including satisfied customers, management, and employees.

Because ISO 9001 specifies the requirements for an effective quality management system, organizations find that using the standard helps them:

- Organize a QMS
- Create satisfied customers, management, and employees
- Continually improve¹.

Best practices in human behaviour have taught that there is a group of common motivators as follows:

- Achievement
- Recognition
- The work itself
- Responsibility
- Advancement
- Growth².

Each employee has a different set of factors that motivates him to do his best work. Business owners need to understand what the motivations of workers are in order to effectively manage and grow a business that has the full support of its employees. Money is often the first factor to come to mind, but successful entrepreneurs will see that as just one part of a larger picture of incentives that drives employees to excel at their jobs. Many people work to provide housing, food, clothing and entertainment for themselves and their families. Works allows people to live. Some workers will dedicate greater time and effort for the opportunity to increase their pay through raises, bonuses or promotions. Others may be happy to accept a less competitive pay package in exchange for doing work that they enjoy³.

Some other employee motivators are: Communication - Honest, frequent two-way communication between workers and managers, including constructive discussion of workplace issues.

Challenging and exciting work - Ensure every employee has a challenge plan and is periodically asked to rate the degree of job excitement.

Opportunities - Reward managers for developing their employees and make sure that employees are held accountable for following through on their individual learning plans.

Recognition and reward for performance - Make it clear what the incentives are and reward fairly across all departments so employees see the benefits of effort.

Control over the job - You've employed your staff to do a job, so let them do it. Trust people to be able to shape the way they work and the projects they get involved in.

Business Impact - Provide employees with periodic reports on the effect their projects are having on the business so they know their work makes a difference⁴

Moreover, Prajogo et Brown $(2006)^5$ report the benefits of being small include: change is quicker to implement owing to fewer management layers, the ability to make decisions quicker, fewer staff members to train and the ease of communication, visible and accessible leadership at the workplace. However, for SMEs, Chittenden, Hall, and Hutchinson $(1996)^6$ found that ISO 9000 registration resulted in increased overhead costs, increased inspection/supervision, reduced flexibility and increased labour costs as the main reasons why small businesses do not use ISO 9000. It was perceived that certification would increase their costs, add too much paperwork and was a time-consuming process (Yusofet Aspinwall 2000)⁷.



According to Casadesus et al.,(2000), perceptions of the benefits of ISO 9000 have eroded over the last few years in spite of the changes and improvements supposedly provided by the latest version of the standard. However, many studies have suggested that organizations certified for longer periods of time tend to garner greater benefits than more recently certified organizations because they have had more time to integrate improvements derived from ISO 9000 (Escanciano et al., 2001)⁸.

OBJECTIVES OF THE STUDY

- 1. To Study and understand whether ISO 9001 Quality Management System has any effect on Workforce Motivation.
- 2. To test significance of impact of ISO 9001 on Workforce Motivation.

HYPOTHESIS

H0: There exists no influence of implementation of ISO 9001 QMS on Workforce Motivation.

H1: There exists influence of implementation of ISO 9001 QMS on Workforce Motivation.

RESEARCH METHODOLOGY

The Primary data has been collected from employees 5 Major Manufacturing Units of Pune Region. From each unit 16 responses has been planned to be collected, i.e total response 80 responses were planned but in actual the received response is 73. The range of respondents varies from Higher Management to Supervisory level. The responses were collected using structured questionnaire enabled with 5 point likert's scale. The formulated hypothesis has been tested using chi square test and one sample t test.

Limitation:

The Study is limited to Pune region only. The conclusion of the study is based on the received responses. The Analysed data may not be useful for generalization.

DATA ANALYSIS AND INTERPRETATION

Q1. Due to ISO 9001 Implementation there exist honest two way communication between workers and Managers?

Scale	S. D.	D	N	А	S.A.	Total
Employee Response	0	0	2	58	13	73
%	0	0	2.73	79.46	17.81	100

Interpretation: The above table depicts that majorly 79.46% respondents agrees and 17.81% respondents strongly agree that due to ISO 9001 there exist honest two way communication between workers and Managers

Q2. Quality Improvement related performances are recognised and rewarded by higher management?

Scale	S. D.	D	N	А	S.A.	Total
Employee Response	0	1	7	55	10	73
%	0	1.37	9.59	75.34	13.70	100

Interpretation: The above table reveals that 75.34% of respondents agree and 13.70% of respondents strongly agree that Quality Improvement related performances are recognised and rewarded by higher management.



Q3. Employees can detect and report Quality problems to the Management?

Scale	S. D.	D	Ν	А	S.A.	Total
Employee Response	0	0	8	49	16	73
%	0	0	10.96	67.12	21.92	100

Interpretation: The above table shows that 67.12% of respondents agree and 21.92% of respondents strongly agree that Employees can detect and report Quality problems to the Management.

Q4. Employees are also involved in solving quality problems?

Scale	S. D.	D	Ν	А	S.A.	Total
Employee Response	0	0	9	50	14	73
%	0	0	12.33	68.49	19.18	100

Interpretation: The table above Point up that 68.49% of respondents agree and 19.18% of respondents strongly agree that Employees are also involved in solving quality problems.

Q5. ISO 9001 generates sense of responsibility and belongingness towards organization?

Scale	S. D.	D	N	А	S.A.	Total
Employee Response	0	2	11	43	17	73
%	0	2.74	15.07	58.90	23.29	100

Interpretation: The table illustrate that 58.90% of respondents agree and 23.29% of respondents strongly agree that ISO 9001 generates sense of responsibility and belongingness towards organization.

Q6. ISO 9001 helps provide better working conditions?

Scale	S. D.	D	Ν	А	S.A.	Total
Employee Response	0	0	10	47	16	73
%	0	0	13.70	64.38	21.92	100

Interpretation: The table demonstrate that 64.38% of respondents agree and 21.92% of respondents strongly agree that ISO 9001 helps provide better working conditions.

Q7. Implementation of ISO 9001 helps in better communication between employees of different departments?

Scale	S. D.	D	Ν	А	S.A.	Total
Employee Response	0	0	12	44	17	73
%	0	0	16.44	60.27	23.29	100

Interpretation: The table exhibit that 60.27% of respondents agree and 23.29% of respondents strongly agree that Implementation of ISO 9001 helps in better communication between employees of different departments.



Q8. Implementation of ISO 9001 has also helped in getting better pay for the employees?

Scale	S. D.	D	Ν	А	S.A.	Total
Employee	0	5	9	47	12	73
Response						
%	0	6.85	12.33	64.38	16.44	100

Interpretation: The table shows that 64.38% of respondents agree and 16.44% of respondents strongly agree that Implementation of ISO 9001 has also helped in getting better pay for the employees.

Hypothesis Testing:

1. Chi-Square Test

Descriptive Statistics

	Ν	Mean	Std. Deviation	Minimum	Maximum
H1	73	4.0531	.47777	2.63	4.88

Interpretation: The Table Above shows the descriptive statistics data. With response minimum value of 2.63 and maximum value 4.88

Frequencies

H1									
	Observed N	Expected N	Residual						
2.63	1	5.2	-4.2						
2.75	1	5.2	-4.2						
3.00	3	5.2	-2.2						
3.13	3	5.2	-2.2						
3.63	1	5.2	-4.2						
3.88	1	5.2	-4.2						
4.00	30	5.2	24.8						
4.13	16	5.2	10.8						
4.25	3	5.2	-2.2						
4.38	1	5.2	-4.2						
4.50	2	5.2	-3.2						
4.63	2	5.2	-3.2						
4.75	5	5.2	2						
4.88	4	5.2	-1.2						
Total	73								

Interpretation: The above figure depicts Observed, expected and residual value.

Test Statistics

	H1
Chi-Square	164.233 ^a
df	13
Asymp. Sig.	.000

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 5.2.

Interpretation: The above table shows that Chi square value of 164.233 (df=14, n=73), p<0.05 is significant at 14 degree of freedom. Thus we reject Null Hypothesis and accept alternate hypothesis that is, there exists influence of implementation of ISO 9001 QMS on Workforce Motivation.



2. <u>T-Test:</u>

One-Sample Statistics						
	Ν	Mean	Std. Deviation	Std. Error Mean		
H1	73	4.0531	.47777	.05592		

Interpretation: The above table shows response Mean= 4.0531 and Standard deviation= 0.47777 of one sample t test.

One-Sample Test

	Test Value = 3					
					95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
H1	18.832	72	.000	1.05308	.9416	1.1646

Interpretation: The value of the two tail significance is less than 0.05; the output indicates that there exists significant impact of implementation of ISO on Workforce Motivation. Thus Alternate hypothesis is accepted.

FINDINGS

- 3. ISO 9001 implementation has helped in improving communication between workers and managers.
- 4. The performances related to Quality improvement are recognised and rewarded by higher management.
- 5. Employees are empowered to detect quality problems and have liberty to report the quality issues to the Management.
- 6. Employees are involved in finding remedies for organizations quality problems.
- 7. Implementation of ISO 9001 has helped to develop sense of responsibility and belongingness of employees towards Organizations.
- 8. ISO 9001 implementation provides better working conditions to the employees.
- 9. Implementation of ISO 9001 has helped in better communication between employees of different departments
- 10. Implementation of ISO 9001 has also helped in getting better pay for the employees.
- 11. There exists significant impact of implementation of ISO on Workforce Motivation

CONCLUSION

For any organization to be successful has to deliver quality products and services. For producing quality products and services ISO QMS helps to set up standardized procedures, but to follow these standardized processes motivated employees are must. Motivated work force is required crucially at the time of Planning, implementation, Checking and execution of the standardised procedures.

Implementation of ISO 9001 improves communication between workers, managers and other departments, Quality initiatives are rewarded by higher management, employee is empowered to detect and solve organizations quality problems, employees develops sense of belonging towards organization, ISO 9000 enables organizations to pay better packages to its employees. Thus, the study has shown interlink age between implementation of ISO on Workforce Motivation.

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