



Implementation of Quality Management System ISO 9001:2015 at Public and Private Sector Universities: Challenges and Prospects

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Abstract- Over the years, standards of quality management system have been advocating and promoting by ISO international organization. Recently, its activities have been increasing to other related topic of environmental and social policy. This study is related to the investigation of the challenges in universities in the implementation of ISO. The key objective of the study was: to investigate the challenges of ISO 9001:2015 in the implementation of quality management system in public and private universities. Researcher selected descriptive style. Population of the study comprises all the teachers in the public and private universities of Islamabad, Punjab, and Khyber-Pakhtunkhwa. To draw a representative sample random sampling was used from the population. The sample size was comprised of five hundred sixty teachers. Data was collected through self-developed questionnaire. Findings of the study revealed that top management commitment was found at the top of the list. The finding of the study was limited to geographical limits, and sample survey. Findings may implicate for teachers, administration and policy makers at universities level in Pakistan.

Keywords: universities, standards, ISO 9001:2015, quality management system, quality

I. INTRODUCTION

Traditional approach that widely spread in the developing countries is suffering from various challenges relatively ineffective and inefficient focusing the quality assurance importance in universities. Many researchers conduct the researches in developing countries in this matter. Integrating the new process approach like Bologna -type process (Zand & Karrar, 2010) reforming the curricula (Asaid, 2010). Mola (2007) surveying the result of present studies shows that for their work improvement, numerous universities get ISO certification or get ISO certification for prestige's images. Zapata-Garcia, Llauradó, & Rauret (2007) moreover, maximum of them trying to know the perception of stakeholders regarding ISO and act accordingly. The world of education change today, even great chances in the future. This is true because of fact technology evaluation, infrastructure availability and technology, which are important and supportive for universities. Supportive of higher education. As universities are dynamic bodies, they are supportive for adopting a new approach/ model to keep up a continuous level of flexibility. Universities are asked to come closer to the problem of society and also cooperative with reach institution and private companies to find a solution. This would do that well establish quality management standards and practices operate within universities on the basis of these evidences, the core question in this assessment associated with the extent of the academic requirement of universities. What are the key challenges of ISO 9001:2015 QMS practices implementation in universities?

First inspection in 1987 in order to cover a wide range of sector ISO 9001 has been modified four times for a wide variety of segments. In 2015 its evaluation has been considered as a standard for meeting the requirements and heads of universities. A wide range of higher education institution inducted the confidence through the implementing of ISO 9001 into their system, higher education institution is still limited. The objective of the paper is to assess the challenges of ISO 9001:2015 for the implementation in universities. Effective implementation of QMS standards in universities is becoming an essential concern. Several research in all over the world conducted concerning this matter to improve the quality of universities (Tari & Dick, 2016).

The research identifies a range of QMS challenges, moreover, range of outcome from implementation of administrative task (teaching evaluation), managerial control (output against targets and research) (Teelken, 2012). Numerous think that these attitudes do not enhance the quality of research. The other suggests optimistically affect in term of how research is judged and measured. Other paper suggests that QMS in research and teaching activities are applied through intelligent adoption, including QM practices many successfully apply in an institution (Voss et al., 2005). In quality management system, overcoming the difficulties through implementation in the area of teaching and learning (Harvey and Williams, 2010). The challenges to implement are alike those found in the industry: inadequate resources, resistance to change,

employee training (Bhat & Rajashekhar, 2009). Some article covers other barriers specifically in the HEIs topic (Koch, 2003; Cruickshank, 2003; Srikanthan & Dalrymple, 2007).

- Absence of standards that reflect customer requirement.
- Trouble of assessing HEIs product, especially who are the customer of measuring core learning process,
- Lack of quality for manger respondents and lack of quality improvement for empowerment of staff,
- Academic liberty and conflict of resources, research responsibilities,
- In the universities difficulty of governing teaching due to a diversity of programs, delivering modes, personal to be controlled, sites of delivering.

Overall in HEIs QM implementation in business and education journal suggest that QM implementation is similar as in other service department/ sector, whereas, a serval paper in the e educational journal identify that in teaching and learning process its application is difficult.

II. PURPOSE OF THE STUDY

The key purpose of the study is investigating the challenge that faced by universities in the implementation of ISO 9001:2015. This study also suggests some efficient and workable recommendation for successful implementation of ISO in the universities

III. OBJECTIVE OF THE STUDY

Identify the challenges and prospects of quality management system ISO 9001:2015 in the implementation at public and private sector universities.

IV. RESEARCH HYPOTHESIS

As it was a descriptive study, so the researchers tested the following null hypothesis:

Ho: There is no significant difference between the challenges and prospects of quality management system ISO 9001:2015 in the implementation at public and private sector universities.

Delimitation

This study was delimited to the perception of teachers from seven public and seven private universities of Islamabad, Punjab, and Khyber-Pakhtunkhwa only.

V. LITERATURE REVIEW

Based on the framework having following challenges is used in this study.

Resistance to change

Boiral, (2003) analyze the perception of resistance regarding ISO standards and certification process. Ahmed et al (2006) resistance to change is related with the impedance to new implementation. It is noteworthy that universities and faculty members are taking change for granted. Karapetrovic, (1998) in a university environment improvement of quality system will surely meet. Mixed review regarding additional documentation is often involve. Focus on quality management system establishment with many benefits to professors, staff members and individuals. Hussein (2014) defines that resistance to change is stronger in universities than other organization because it is related to people who may not accept critics in their work style because who are educated they considered themselves as good reference to another. This may lead to ineffective management of resistance to change or failure to establish a new culture or structure that culture needed for adaptation of QM implementation.

Lack of awareness

It is connected to the process of its implementation quality is not theory or science that can be taught to someone it is related to a culture that should be lived. Awareness enhances confidence in any organization (Kothar & Lal Pradhan, 2011). As it is a key factor for the implementation of QMS and it involves numerous problems on the level of cooperation, faculty and staff members' participation (Mehfooz & Saeed Lodhi, 2015).

Resources availability

Resources may be human or finical such as (faculty member, staff, money, and machinery) which are important for controlling, scheduling or organizing the tasks. Resource management as one core requirement of ISO 9001 which are in fine for ISO 9001 implementation in universities (Hussein et al, 2017).

Commitment of top management

Top management is the decision makers in the case of universities, whether it was a director, dean, president, and board of directors, rectors or other top management personnel. One of the key challenges is commitment of top management in quality management system implementation in universities (Trivelias et al, 2012).

Lack of funding

Funding is needed for payment of certification, payment for external consultants, resources, and training (Arora, 1996). Due to lack of funding most of the certification were discontinued (Zgodavova et al, 2017.)

Lack of involvement of people

Psychogios & Priporas (2007) highlighted the importance of involvement of people in the QMS. People involvement, team commitment approach, and administrative structure, And system are very important for implementation of ISO 9001 (Moturi & Mbithi 2015). Still, universities core service department and academic are frequently not involved and consulate in the implementation of ISO 9001 (Corbett & Rastrick, 2000). Moturi & Mbithi (2015) found that lack of involvement of people and commitment of staff. Some staff more focus on sustaining audits rather than emphasized on making way of life. Ab Wahid (2019) found the lack of involvement of the people is a key challenge in ISO 9001 implementation in universities.

Existence of accreditation

For some universities it is a slight confusion that accreditation system implementation will replace the quality management system requirement as outlined and defined by the standard of ISO 9001. Hussein et al (2017) define that presence accreditation of universities will positively help, in fact tracing ISO 9001 adaptation of universities. Thandapani et al (2011) moreover, universities should be aware that ISO certification offers modest advantages needed to sustain for the program in the fast growing world that admires certification.

Lack of proper professional training

Al-Najjar & Jawad (2011) describe that necessary training improves staff performance purifications in their task. Training should be given to staff on the basis of training assessment needs. Lack of training is considered a challenge in the implementation of QMS ISO 9001.

Time management

University's deans, professors, staff and other employees are persistently burdened with their administrative and educational tasks and duties. While in their daily work multi- tasking is the part, but it signifies an existential challenge. Hence, for tackling this issue, allocate the job of quality management system implementation to new devoted staff who are trained for required mission this is the best way. Universities must detect the training needs of staff and faculty and also deliver satisfactory training (Hussein et al; 2017).

Inappropriate university culture for implementation of QMS

The key challenge of QMS effective implementation is organizational culture (Corbett & Rastrick, 2000). Quality management system implementation employs a cultural change at universities through a number of strategies. Furthermore, these strategies focus on measurement, information, internal audits (Alalfy, & Abo-Hegazy, 2015).

VI. METHODOLOGY

A descriptive survey design was adopted to explore the described problem. Teachers from Islamabad, Punjab, and Khyber-Pakhtunkhwa in the public and private universities were the population of the study. Random sampling was used to draw a representative sample from the population. Seven public and seven private universities were selected randomly. The sample consisted of five hundred sixty teachers (280 public and 280 private) teaching at universities of Islamabad, Punjab, and Khyber-Pakhtunkhwa.

VII. RESEARCH DESIGN

A self-constructed questionnaire based on extensive review of related literature on a five point Likert scale (strongly disagree_1 to strongly agree_5) was used. Pilot testing was completed for the purpose of validity and reliability before actual data collection. This questionnaire was validated from five experts in the field who declared it valid for the data collection. Result provide consistent outcomes in repeated measurement (Rahaman, 2011). Saraph et al (1989) 0.7 is accepted level of Cronbach alpha in exploratory studies 0.6 is also acceptable. By using SPSS the internal consistency of the constructs was measured. Moreover, its reliability was extracted through Cronbach's alpha that was .903. In the light of expert views and results the researcher made some improvements and changes in the questionnaires.

VIII. DATA COLLECTION

Through personal visits to the sample universities data was collected. Enough time was given to marking all the questions. It is assured to all subjects while revealing the research study that confidentiality and anonymity would be maintained. It is assured to all subjects that without any biasness and hesitation they respond the questionnaire. With the help of mean and t-test data were analyzed.

IX. RESULTS

Table 1
Lack of top management commitment (N= 560)

Sector	N	Mean	SD	t-value	df	Sig
Public	280	4.33	.77	3.51	558	.000
Private	280	4.06	1.05			

Table No. 1 indicates that t value is significant. There is a significant difference between the mean of public and private sector teachers in universities (for public sector universities teachers M=4.33, SD=.77 and for private sector universities teachers M=4.06, SD= 1.05). The value of t=3.55 is highly significant at 0.05 level of confidence.

Table 2
Time management (N= 560)

Sector	N	Mean	SD	t-value	df	Sig
Public	280	4.10	1.02	4.18	558	.000
Private	280	3.72	1.13			

Table No. 2 indicates that t value is significant. There is a significant difference between the mean of public and private sector teachers in universities (for public sector universities teachers M=4.10, SD=1.02 and for private sector universities teachers M=3.72, SD= 1.13). The value of t=4.18 is highly significant at 0.05 level of confidence.

Table 3
Resistance to change (N= 560)

Sector	N	Mean	SD	t-value	df	Sig
Public	280	4.05	1.18	2.60	558	.009
Private	280	3.78	1.18			

Table No. 3 indicates that t value is significant. There is a significant difference between the mean of public and private sector teachers in universities (for public sector universities teachers M=4.05, SD=1.18 and for private sector universities teachers M=3.78, SD= 1.18). The value of t=2.60 is highly significant at 0.05 level of confidence.

Table 4
Existence of accreditation (N= 560)

Sector	N	Mean	SD	t-value	df	Sig
Public	280	3.95	1.17	1.36	558	.174
Private	280	3.82	1.06			

Table No. 4 indicates that t value is non-significant. There is not a significant difference between the mean of public and private sector teachers in universities (for public sector universities teachers M=3.95, SD=1.17 and for private sector universities teachers M=3.82, SD= 1.06). The value of t=1.36 is non-significant at 0.05 level of confidence.

Table 5
Lack of involvement of people (N= 560)

Sector	N	Mean	SD	t-value	df	Sig
Public	280	4.03	1.08	5.33	558	.000

Private 280 3.51 1.24

Table No. 5 indicates that t value is significant. There is a significant difference between the mean of public and private sector teachers in universities (for public sector universities teachers M=4.03, SD=1.08 and for private sector universities teachers M=3.51, SD= 1.24). The value of t=5.33 is highly significant at 0.05 level of confidence.

Table 6

Lack of funding (N= 560)

Sector	N	Mean	SD	t-value	df	Sig
Public	280	4.03	1.17	.266	558	.790
Private	280	4.00	1.03			

Table No. 6 indicates that t value is non-significant. There is not a significant difference between the mean of public and private sector teachers in universities (for public sector universities teachers M=4.03, SD=1.17 and for private sector universities teachers M=4.00, SD= 1.03). The value of t=.266 is non-significant at 0.05 level of confidence.

Table 7

Lack of proper professional training (N= 560)

Sector	N	Mean	SD	t-value	df	Sig
Public	280	4.06	1.00	.080	558	.937
Private	280	4.05	1.11			

Table No. 7 indicates that t value is non-significant. There is not a significant difference between the mean score of public and private teachers in universities (for public sector universities teachers M=4.06, SD=1.00 and for private sector universities teachers M=4.05, SD= 1.11). The value of t=.080 is non-significant at 0.05 level of confidence.

Table 8:

Lack of awareness (N= 560)

Sector	N	Mean	SD	t-value	df	Sig
Public	280	4.13	1.15	.998	558	.319
Private	280	4.03	1.04			

Table No. 8 indicates that t value is non-significant. There is not a significant difference between the mean of public and private sector teachers in universities (for public sector universities teachers M=4.13, SD=1.15 and for private sector universities teachers M=4.03, SD= 1.04). The value of t=.998 is non-significant at 0.05 level of confidence.

Table 9

Lack of Resources (N= 560)

Sector	N	Mean	SD	t-value	df	Sig
Public	280	4.03	1.05	.445	558	.656
Private	280	4.00	1.03			

Table No. 9 indicates that t value is non-significant. There is not a significant difference between the mean of public and private sector teachers in universities (for public sector universities teachers M=4.03, SD=1.05 and for private sector universities teachers M=4.00, SD= 1.03). The value of t=.445 is non-significant at 0.05 level of confidence.

Table 10

Inappropriate university culture for implementation of QMS (N= 560)

Sector	N	Mean	SD	t-value	df	Sig
Public	280	3.85	1.21	3.65	558	.000
Private	280	3.43	1.43			

Table No. 10 indicates that t value is significant. There is a significant difference between the mean of public and private sector teachers in universities (for public sector universities teachers M=3.85, SD=1.21 and for private sector universities teachers M=3.43, SD= 1.43). The value of t=3.65 is highly significant at 0.05 level of confidence.

0.05 level of confidence.

X. FINDINGS

1. Public sector universities have lack of top management commitment as compared to private sector universities.
2. Public sector universities have challenge of time management higher than private sector universities.
3. Public sector universities have resistance to change as compared to private sector universities.
4. Both public and private sector universities have challenge of existence of accreditation.
5. Public sector universities have a lack of involvement of people than private sector universities.
6. Both public and private sector universities have a lack of funding.
7. Both public and private sector universities have lack of proper professional training.
8. Both public and private sector universities have a lack of awareness.
9. Both public and private sector universities have a lack of resources.
10. Public sector universities have an inappropriate university culture for implementation of QMS compared to private sector universities.
11. Lack of top management commitment in both public and private sector universities is top of the list.

XI. DISCUSSION

Current study was conducted to assess the challenges that affect QMS in universities in Pakistan. (Ater, 2013) describe that successful and effective QMS can be a powerful vehicle for achieving excellence in performance. Continuous improvement and customer satisfaction can be achieved through QMS implementation. But unfortunately this is ignoring area in Pakistan, which is a reason of failing education which is the greatest threat for national development because universities play a vital role in national development.

For raising the standards of universities at global level, it is time of the time and essential to adopt international certification. Thus, the present study was conducted on this ignored area for assessing the challenges of ISO 9001:2015 in universities for quality management system successful implementation. Yusuf et al (2007) describes that manger influence and its role is very important to any organization's success. Result reveals that there is a lack of commitment of top management for QMS implementation in universities. Which lead to failure of QMS in universities. Hesham & Magd (2007); Magd (2007) also reported that lack of commitment of top management as a challenge. Present study identifies that time management is also a challenge as by (Hesham & Magd, 2000); (Hussein et al., 2017) also identify that time management is a challenged. In successful implementation of QMS resources is very important (Ater, 2013). Without funding and resources institution face a lot of problems in every field such as management, planning, infrastructure, administration, instructional process and student performance. Majority of teachers of public and private universities were agreed that they have a lack of resources for the implantation of QMS in universities. Lack of resources as a challenge was also reported by (Bhuiyan & Alam, 2005); (Ab Wahid, 2019). Atieno & Simatwa (2012) describe that lack of involvement of people is the big challenge. As their competences and commitment. Results show that in the process of implementation of the QMS in the university's involvement of people is a challenge. Lack of involvement of people as a challenge was also assessed by (Moturi & Mbithi 2015). Suleman (2015) defines that infrastructure has an influence on output. Teachers agree that infrastructure has an influence on the QMS implementation. Resistance to change is also a main challenge in quality management system implementation. Related finding was reported by (Psomas et al. 2010). Because of lack of proper professional training in university teachers face many problems in their profession. As teachers nominated for training those who are not suitable and eligible for training. In a more simple way on the basis of favoritism teachers are nominated for training. For attending the training competent personnel's hesitate because attractive packages are not given to them. The present study explores that lack of training so which badly affect QMS implementation in universities. Lack of proper professional training as a challenge was also stated by (Al-Najjar, & Jawad, 2011). Lack of awareness is a challenge found in the

study. Mehfooz & Saeed Lodhi (2015) found that Lack of awareness is reflected as the most significant one meanwhile it is the initial point for the quality standards implementation. Inappropriate university culture for implementation of QMS is a challenge found in the universities. Alalfy & Abo-Hegazy (2015) also found the challenge of inappropriate university culture for implementation of QMS in universities.

XII. CONCLUSION

Results reveal that the main challenges that faced in implementation of quality management system ISO 9001 2015 in university contain in public and private sector universities have an absence of top management commitment, time management, resistance to change, existence of accreditation, lack of involvement of people, lack of funding, lack of proper professional training, lack of awareness, lack of resources, inappropriate university culture for implementation of quality management system. Both in public and private sector universities heads of the list is the lack of top management commitment.

XIII. RECOMMENDATION

Following are the some recommendation for further improvements:

- Universities need a committee system to show a major part in quality management system and need to revise its staff appraisal system at all levels. When senior management change universities have to reduce the distribution for the implementation of the QMS.
- All the universities bounded with competent authorities and adopt QMS like ISO 9001:2015 for international recognition.
- A special supervisor staff check universities every year and ensure QMS implementation in a university.
- In service professional training regarding QMS implementation should be provided with attractive packages and incentive. Furthermore, professional training regarding QMS implementation based on feedback from stakeholders.
- Proper funding may be provided to universities and proper check and balance system must be established. Moreover, universities need to give more consideration to link proposed budget with the operational plan, strategic plan, vision and mission, equipment's development and infrastructure.
- Competent and dedicated staff must be appointed.
- Future study may be conducted in provincial or developed and developing countries comparison of QMS in universities.

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