Barriers of TQM Implementation in Libyan Industries

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Abstract

In today’s competitive market there are many challenges facing Libyan construction industries. The ability of Libyan companies to effectively introduce quality management system QMS such as ISO and Total Quality Management (TQM) is one of the main challenges to Libyan industries. TQM can empower employees and develop the organizations ability of responding to international competition.

The main purposes of this study were to identifying the barriers to TQM implementation in Libyan industries. The research investigates the quality management systems which are currently being Implemented in the Libyan construction industry (LCI). A number of senior managers of construction companies in Libya were interviewed to identify barriers, drivers and benefits of QMS initial results suggest that LCI has suffered from; employee resistance to change and over emphasis on production quantity to the detrimental of quality, lack of skilled labour. The research aims to help address some of the problems by developing a generic company-wide framework to facilitate the adoption of quality management principles which consider local culture, organisational readiness and maturity.

Keywords: Total Quality Management (TQM), Libyan construction industry, Quality Management System (QMS)
1. Introduction

Currently, for a company to be successful and have steady organisational growth, the most important cause is quality management. This works for both national and international markets. Construction companies must provide high quality products consistently and must use added value to appeal to their customers and clients and also to remain in the highly competitive business climate. Any countries economy relies on their construction industry to be their backbone and it is also vital to a countries infrastructure. However the construction industry faces a lot of problems. Some examples include: economic, high fragmentation, low productivity, lack of standards, poor quality and instability. McCaffer (1998) states that most countries are faced with similar problems in their construction industry even though the economy of each country is different. The requirements stated in Kometa & Olomolaiye (1997) about the quality standards are often not fulfilled by construction clients. Kometa & Olomolaiye (1997) also states that clients are still displeased and many other problems are still arising in the construction industry, however efforts have been made and timing and cost overruns have been improved. However this still means that the construction industry in Libya is still not up to its fullest potential and is not at its best therefore it will have problems meeting the competitive challenges that arise in the modern fast changing market that we have now. The findings of Torbica & Stroh (1999) were that competitive edge is with those who manage their resources most effectively and offer a timely response to the demands of the market.

For the recent years, the Libyan construction sector has been going through a radical change driven by the (ISO) quality policy of the Libyan government. Recently, the number of contractors obtaining certification of ISO 9000 Quality Management System (QMS) is ever increasing. However, with insufficient experience on ISO quality implementation within the Libyan environment, the construction participants are staggered with several performance-related problems. Sayah,(2006) A number of quality managers and senior managers of construction companies in Libya were interviewed to identify barriers, drivers and benefits of quality management system (QMS) initial results suggest that (LCI) has suffered from; employee resistance to change and over emphasis on production quantity to the detrimental of quality lack of skilled labour and the research aims to help address some of the problems by developing a generic company-wide framework to facilitate the adoption of quality management principles which consider local culture, organisational readiness and maturity.

2. Overview

Libya is an African country that spans over 1,759,540 square kilometres (679,182 sq. miles), making it the 17th largest nation in the world by size. It is linked to the North by the Mediterranean Sea, and bordered in the West by Tunisia and Algeria, the southwest by Niger, the South by Chad and Sudan and to the East by Egypt. Libya has the longest coast amongst all African countries bordering the Mediterranean which stands at 1770 kilometres (1100 miles), The portion of the Mediterranean Sea in the North of Libya is often referred to as the Libyan Sea. The construction industry in Libyan is consequence of interaction of geographical, historical, social, political, and economic and technology factors. The Libyan industry operates in difficult geographical social and economic circumstances.
The operations are concentrated in four separate regions influenced by social tribalism and nepotism, fluctuation in oil revenue and foreign workers.

### 3. Quality Management Systems (QMS)

The effectiveness of an organisation and its people depends on the extent to which each person and department perform their role and move toward the common goal and objectives.

The traditional, post-operation inspection process, which was used during the early part of the last century, was largely replaced by techniques of quality control (QC) and quality assurance (QA). Then, the approach of the total quality management (TQM) was then developed and applied by leading companies. An organisation that continues to use traditional methods, because it is the way they have always done it, will not resolve their quality problems effectively. Such methods add cost and delay by employing more inspectors and this approach does not promote quality because it involves expensive repair and rework. TQM is an approach eliminates the costs and time delays, improving the competitiveness and flexibility of whole organisation.

The figure shows the relation between the four stages of control (Dale and Plunkett).

![Figure 1: Relationship between the four stages of quality management](image)

- **INSPECTION**: activity such as measuring, examining, testing or gauging of one or more characteristics of all entities and comparing the result with specified requirement in order to establish whether conformity is achieved for each characteristics

- **QUALITY CONTROL (QC)**: operational techniques and activities that are used to fulfil requirements for quality

- **QUALITY ASSURANCE (QA)**: all the planned and systematic activities implemented within the quality system and demonstrated as needed to provide adequate confidence that an entity will fulfils requirement for quality.

- **TOTAL QUALITY MANAGEMENT (TQM)**: management approach of an organisation centred on quality based on the participation of all its members and aiming at long-term
success through customer satisfaction, and benefit to all member of the organisation and to society.

4. Research methodology

The objective of this paper is to assess TQM in number of Libyan contracting organisation to explain and identifying barriers, drivers, and the benefits of implementing (QMS) therefore 10 interviewing was arranged with the quality managers and senior managers to discuss the research and objectives.

So the research made 10 interviews conducted at the preliminary literature review stage to support the preliminary review where the interviews helps in identifying the major problems in the Libyan construction industry and formulated the objectives of the research. The preliminary stage of this research focused on the observation and analysis of the construction industry in Libya at this stage of identifying the problems this approach also used to collect data of TQM in Libyan construction industry.

However, according to Oppenheim (1996) “interviews often have a higher response rate they offer the opportunity to correct misunderstanding and to carry out observation and rating while controlling for incompleteness and for answering sequence and the interviewers can often succeed with respondent who have reading or language difficulties but the interviews are expensive and time consuming to conduct and to process”.

At the beginning of each interviews the research asked for permission to use a tape recorder to record the interview for future reference and data analysis but the interviewees refused permission to tape so after each interviews the researcher wrote script of the interviews in the Arabic language then researcher translated to English language.

The data required for the implementing QM in the LCI were collected through the personal interviews and questionnaires, the interviews took place before to development of the questionnaires. The data extracted from the interviews with the Libyan contractors and the literature reviews were used to develop the questionnaires. As apart of the data collection the research conduct personal interviews with number of contactors, about the implementing the QM in the Libyan construction industry and the problems of the Libyan industry. And also the interviews emphasis the effectiveness of the quality management as the solution to problems in the construction industry (to identify the construction industry problems) the interviews consists of number of managers such as quality managers and senior managers the emphasis in these interviews was on the implementing of TQM as a solution for the LCI in general, also the interviews discussed the challenge and the problems of the (LCI) where the nature of the CI in general and in Libya particular makes the TQM unrealistic according to the interview one of the quality managers who had attempted to implement TQM.
5. Contractor interviews result

The data required for the implementing quality management (QM) in the Libyan construction industry (LCI) were collected through twenty five personal interviews; the interviews took place before to development of the questionnaires. The data extracted from the interviews with the Libyan contractors and the literature reviews were used to develop the questionnaires.

The interviews emphasised the effectiveness of the quality management as the solution to problems in the construction industry (to identify the construction industry problems). The survey includes interviews with managers such as quality managers and general managers. The emphasis in these interviews was on the implementing of TQM as a solution for the LCI in general.

In the interviews the challenge and the problems of the LCI were also discussed. The nature of the (CI) in general and in Libya particular makes the TQM unrealistic according to the interview with one of the quality managers who had attempted to implement TQM.

The objectives of these interviews were to identify the critical success factors of implementing total quality management in the Libyan construction industries; two contractors interviewed were relatively large and had an average of 25 years in business experience.

The quality and senior managers were asked about the critical success factors of implementation of quality management, and how these factors affected to these companies.

In advance of the interviews, the author sent a letter to all potential interviewees, describing the purpose and the background of the research work. Each of the quality and senior managers was given a set of questions to answer. At the beginning of each interviews the research asked for permission to use a tape recorder to record the interview for future reference and data analysis but the interviewees refused permission to be taped so after each interviews the author transcribed in Arabic language and then translated to English language.

5.1 Management commitment obstacle

The major obstacle to quality initiative in Libyan construction companies is the lack of management commitment such as the lack of employee’s involvement, lack of incentives, lack of motivation inadequate recourses employees resistance to change lack of customer care, and lack of continues improvement

Managers in Libyan companies have to be more active and involved with the business; in particularly they need to focus on customer’s needs and wants. They must show further commitment to the quality policy and as they are the managers they must deal with the quality arrangement of the business. Managers must be an example to other employees and demonstrate the dedication needed.

The quality council is set up to manage the arrangement of the quality journey. The quality council are set up to identify any problems or hiccups along the way; they then find a solution to overcome
the problem. The general manager should lead the quality council along with a full time quality related manager; this ensures the quality council is well supported. An external consultant can be hired if extra help is needed to assist in the implementation process. The comprehensive quality policy must be based on the company’s targets, the mission statement and a clear plan on what should be accomplished, including quality goals of all levels of the organization. The quality council’s senior management has the duty to create this policy. The policy will join and focus the efforts of all employees, and set a clear plan on the organizations aims and expectations. This policy should be visible and available for all employees to see so they can learn the organizations expectations and they can refer to it for help, they can also see what tasks need to be done to help accomplish the expectations. The policy should be easy to read so there is a common understanding and can be communicated successfully. Every department should be allocated with a quality committee, this should be directed by the department head. The committee can hold discussions to track how much progress has been made and make sure all employees are aware of the quality policy’s goals. The committee’s set up at each department should be directly linked with the quality council. The mission statement should also be communicated from the top managers to the employees; this should be done frequently to make sure all workers are aware of the mission statement. The mission statement concentrates on the employees; to make sure they are aware of the objectives defining the quality values and expectations from the quality values. Face to face communication should be used to communicate the mission statement at meetings, this is a early implementation step. Top managers should also make sure employees are committed and they participate fully within the organization. To be certain all workers are fully notified top managers must make them aware of the following; preparation, implementation and evaluation of any improvement activities. Assistance, training, acknowledgment and a chance to contribute should be given to employees, this will guarantee all employees achieve the quality goals of the organization. It will also give employees experience and they would have learned and gained knowledge.

5.2 Culture obstacle

The other obstacle organization bureaucracy where the bureaucracy is the greatest day to day problem and major challenge for all Libyan companies Libyan authoritarian and bureaucratic management style have been impeding more participatory and conscious organization culture. The effect of this obstacle was clear from the feedback of all the interviewees in the Libyan

5.3 Organisaiton

The management styles in Libyan companies must be changed. A new approach is required, to create a new approach data must be collected on the current management style and the disadvantages it has, this will help the managers focus on what specifically they need to change with the management style. It will be the first stepping stone for some improvement in the work environment.

Currently, as were revealed by the quantitative and qualitative data analysis, due to the poor management in Libyan companies employees were not working to their full potential, this led to employees feeling de-motivated and boredom. Management should change the organization’s culture and environment and compare their working culture to the culture TQM brings about; this will help
discover the problems which exist. Managers can then begin putting a plan in place to help resolve the problems and help move the organization towards a TQM culture.

5.4 Training and education obstacle

The other obstacle to cause the effect TQM implementation is training and education as I was mentioned by most of the Libyan interviews (quality managers and general managers) have-not receive formal quality management courses where the training for all levels of the organization is the fundamental importance and must be provided continuously.

A vital first step is awareness training; this is where employees learn how to adjust, or what to do differently for quality improvement to take place. Problem identification and solving skills must be learnt, training will also be provided on how to communicate effectively and it can also encourage teamwork and decision making to occur, and employees can improve at a faster, continuous rate. Middle managers must also be well trained and know how to establish quality principles and tools, they must also be trained to teach and be able to help their sub-ordinates. This involvement in training will help make the transition to quality more smooth and successful.

5.5 Empowerment

The other obstacle is lack of Employee empowerment, is the latest way of overseeing organizations towards a more intricate, economical and competitive future. If empowerment of employees is missing then a TQM strategy is deemed as failing. To be a successful organization, employees should be given more authority, control, independence, information and acquaintance. The organization must also have a rewards and recognition system in place relevant to business performance to motivate the workers.

5.6 Salary and incentives obstacle

Every Libyan organization has to operate is the low of salaries for all levels of employees, all employees in the public sectors are state employees and government fixes their salaries as well as yearly increased in their salaries under rigid low called (low 15/1983) this low did not changed from 25 year the consequently it is difficult to motivate employees to work harder or to be more efficient or more effective.

6. Interviewer’s findings

1. Poor internal communication between departments and offices are as follows:

- The lack of scheduling or a clear mechanism for holding the meetings at the level of departments and offices.

- The absence of direct contacts through all level of departments and offices to resolve any problems that may occur. It is through the guidance of internal communications to address
any topic or any work-related departments and offices. Departments and sections all need better communication between each other.

- Prepare scheduled periodic meetings for all level of departments and offices. This applies for all the senior management of the company.

- Increase communication through daily meetings between the directors straight to the departments and offices, departments and sections should be encouraged to discuss the progress of work and overcome any problems or obstacles in a timely manner.

- Reduction of direct internal memos and correspondence with a view to reduce and minimize costs. Direct contact is made to resolve any problems that may occur in the time and this should be done as soon as possible.

2. The employees are not adequately trained about the company’s business operations.

3. The management and the leadership in the Libyan construction companies have inadequate education to understand the quality approach

As will be seen in the literature review, communication systems are a vital component of TQM. However the researcher focused on the internal communication problems encountered by the case study, particularly contractors B and C. The researcher has been asked to address and improve the communication as it is one of the crucial problems that the Libyan companies are facing. In this case these companies had inadequate communication systems. So the researcher will introduce a roadmap or a protocol to all departments which will encourage the Libyan companies to maximize profit and promote TQM principles.

We can also see that there is lack of effective communication systems between the top management and its employees.

As we know the communication gives the employees the knowledge about what is going on in the organization and keeps them updated.

Therefore the most common barriers of effective communication are: difference in meaning, lack of trust, information overload, poor listening skills etc (Goetsch and Davis 2006).

7. Conclusion

- Creating effective communication networks in any company is vital for a successful company; the company has to improve communication. By improving these channels, they must also implement a clear and open structure where the communication flows openly and doesn’t get distorted.
• Creating an atmosphere of trust and mutual respect where communication is improved. Information can be accurately delivered and received as a way of solving and overcoming barriers to communication.

• From the interviews the researcher found that there was a clear lack of implementation of the critical success factors (CSFs) of TQM demonstrated through features such as; lack of knowledge of QM and lack of commitment from the management.

• In my view the Libyan organisation are still in the early stages. Most of the Libyan companies introduced ISO 9000 for the reputation it would bring to the company because some of the local companies had been certified ISO 9000 and it was a success.

• There are weaknesses in communication and information systems in the LCI. Currently the present communication system in the LCI is based on paper and verbal formats; this results in low quality and a low flow of information.

• Libya is not yet ready to accept and adopt TQM because the lack of infrastructure, top management are not keen to be involved in adopting TQM due to lack of education and skills. For these reasons the implementing of the quality management in Libyan construction industry is difficult and it will take a long time to understand the exact meaning of quality management systems and how to implement them.

• Unfortunately some managers working in companies mentioned the policy of their company, they also said that the government does not allow them to delegate some tasks to the employees and give them some authority; in this case the employees could not make a decision until the management (leadership, supervisors) said so.

8. Summary of findings

It is extremely important for Libyan construction companies to have a clear communication system linking all company departments and management as well as outside parties.

It is obvious that the LCC should have an efficient communication system between top management and employees.

A proper chain and efficient information will channels link all parties. This should be instituted so that there is proper information flowing through all departments.

It is apparent that the Libyan construction companies should enhance their effort to understand the opinions and thoughts of employees which will clearly help on achieving the company’s goal and objectives.
It is imperative for managers to encourage their employees more and more towards teamwork as it helps solve problems between employees.

It is very clear that the Libyan managers should set up a training program for their employees; it should particularly focus on quality management systems.

As we know, training is the main target to any organization to increase the ability of their managers and employees.

From the finding when the author asked general managers in the interviews about if the company “B” provides training courses, “the managers said

Managers should not have such training and developing courses, because they are full of knowledge.

9. Limitation of the study

There are some shortcomings that will restrict the scope of this research are mentioned as follows. The research in this study suffers from a number of limitations; every effort has been made to overcome these limitations. The first limitation is the most important; it was a general shortage of data and information regarding the quality management in the Libyan construction industry. The limitation was related to the cultural and social elements of the context of the study, whereby Libyan people are very sensitive about providing information about their work such as income, turnover, and so forth. So, friendships and social and tribal relationships were significant in influencing access to data. Another point that should be mentioned is that the majority of roads and streets and buildings are not named or numbered in Tripoli, and as a result, the research could not make contact easily with the personnel of the construction companies. We chose quality managers and general managers because they are involved in the implementation of total quality management.

In addition, this research concentrates only on one of the Arab countries namely Libya which is a part of the Arab countries. The findings of this study and the proposed roadmap could be implemented to some Arab and Islamic countries that have similar cultural background such as Egypt, Tunisia, Algeria, where the dominant workforce is local people. However, it may be hard to be implemented in most of the other Arab countries because the workforce in these countries is mix of many nationalities. Therefore, further studies should be conducted to compare the findings in other countries where there is a mix nationality in their management and workforce with this study which is totally about Libya and Arab managers and workers.

References


