An Empirical Investigation of Total Quality Management in Libya: A Proposed Guideline of Implementation

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ABSTRACT

Rapid socio-economic and technological changes have urged the implementation of new approaches to procure construction projects. Total Quality Management (TQM) is one of the approaches that contribute towards ensuring that projects are being delivered to the stakeholder requirements. This study identifies critical success factors (CSFs) that affect the implementation of TQM in the Libyan Construction Industry (LCI) and develops guidelines which help companies implement and maintain quality management systems. To achieve these aims, the research employed both quantitative and qualitative methods. Based on a thorough review of literature, a questionnaire was developed and distributed to 200 managers. Data from 130 completed questionnaires were then analysed using Principal Component Analysis (PCA), which reveals the internal structure of the data in a way that explains the dimensions of TQM implementation in LCI. The results identify five reliable and valid TQM dimensions, namely organisation management, communication to improve quality, training and development, employee involvement and recognition, and culture. Supported by relevant literature and interviews with a number of managers, they provide the basis for developing the guideline for successful implementation of TQM in Libyan construction companies.

Keywords: Critical Success Factors (CSFs), Guidelines, Libyan Construction Industry (LCI), Principal Component Analysis (PCA), Total Quality Management (TQM)

BACKGROUND

Libya is an African country that spans over 1,759,540 square kilometers (679,182 sq. miles), making it the 17th largest nation in the world by size. The construction industry is affected by the country’s economic cycle.

However, oil discovery was a turning point for industries in Libya as the government was...
able to spend a substantial amount for the development of the construction industry.

The Ministry of Housing report 1986, maintained Libya from a shortage of skilled labour in the construction industry. The local contractors did not possess the technical, administrative and financial capabilities to undertake medium or large projects.

There are many foreign construction companies (such as Italian, Chinese, French and Korean) operating within the country on various projects ranging from large infrastructure projects to the local road projects. The Libyan government has launched one of the largest public infrastructure investment programs in the world - The Libyan Housing and Infrastructure Board (LHIB), has funds amounting to US$ 50 billion for programs to improve housing, roads and bridges.

Libyan industries operates in four main regions which are influenced by social tribalism and nepotism, fluctuations in oil revenues and foreign workers. Political ideology has played a significant role in determining the current status of foreign labour coming from high unemployment countries such as Egypt, Korea, Pakistan were paid low wages and as a result, local citizens abandoned working in the construction industry and the industry became dominated by foreign labourers.

INTRODUCTION

In the current competitive business climate, one of the most important factors for companies to succeed and grow is management of quality for their products and 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.

The construction industry is the backbone of the economy of any country and it is also vital to a country’s infrastructure. However, the construction industry in Libya faces problems of developing economy, such as high fragmentation, low productivity, and lack of standards, poor quality and instability. Bhimaraya (2005) states that most countries are faced with similar problems in their construction industries even though the economy of each country is different (Lam et al., 2008).

The requirements of the quality standards are often not fulfilled by construction clients. Kometa and Olomolaiye (1997) state that clients are still often displeased and many other problems continue to arise in the construction industry, even though efforts have been made and time and cost overruns have been improved.

Taking Libya as a case in point, this still means that the construction industry in this country is still not up to its fullest potential. Libyan construction industry (LCI) will face problems meeting the competitive challenges that arise in the modern fast changing market that we have now competitive edge; to peruse Construction companies in Libya should manage their resources most effectively and offer a timely response to the demands of the market.

BENEFITS OF IMPLEMENTATION OF TOTAL QUALITY MANAGEMENT (TQM)

The implementation of total quality management will result in:

- Improved employee involvement: (Dale, 1994) the TQM ensures everyone within the organisation should have a clear understanding of what is required and how their processes relate to the business as a whole. Through the practice of TQM, teamwork promotes employees to become motivated and encouraged to control, manage and improve the processes.
- Increase productivity: TQM changes the organisation culture and create a happy working environment due to an effective delegation; empowerment, total staff involvement, problems identified and solutions will become more efficient for working process.
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