Quality and Process Management Systems in the UAE Maritime Industry

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ABSTRACT
The growing maritime industries in the global economy signify the need for applying the science of quality management systems to study the interdisciplinary nature of products and services offered by this sector. In particular, considering the strategic location and liberal trade policies, the maritime sector in the United Arab Emirates (UAE) is considered a critical player and key enabler of international trade. To further strengthen and enhance the role of UAE’s maritime sector in supporting the global maritime industry, it is highly desirable to identify the contributing factors that influence business processes and service efficiency and empirically verify the findings. This study builds on the significance of Quality Management Systems in Marine Industry with special focus on the UAE’s maritime sector.

KEYWORDS
Business Process Management, Maritime Industry, Quality Management, United Arab Emirates

INTRODUCTION
The article aims to empirically examine the impact of an ISO 9001:2008-based Quality Management System (QMS) and business processes on quality and performance of firms in maritime industry. This work is organized as follows: we first make an overview of evolution history of quality management systems and current frameworks. The most relevant characteristics, benefits, and limitations of the ISO 9001:2008 standards and the EFQM Business Excellence Model are then introduced followed by a comparative study based on various contemporary literatures. We then review the QMS and business process frameworks in maritime industries. Three forces factor exclusively influencing the maritime business process complexities are then introduced. The study indicated that the key force factors influencing the maritime industry’s business processes can be well-managed with the application of a robust QMS and that it has a significant positive effects on quality performance and firm performance, that ultimately results in service efficiency and high customer satisfaction. Subsequently an ideal QMS is presented with special emphasis on application of ISO 9001:2008 in the United Arab Emirates (UAE) maritime sector.

NEED FOR FRAMEWORKS
Philosophies of the pioneers in quality stress its importance as an essential competitive weapon for all organizations. It is easily understood there exists a vast area of common aspects in their view points. All of them underline the important role that management plays in implementing quality improvement and the importance of statistical methods and techniques in the “quality transformation” of an organisation.
The need for applied QMS frameworks that integrates all these quality philosophies hence aroused and the first milestone in this regard was the birth of the Total Quality Management (TQM) concept.

**TOTAL QUALITY MANAGEMENT (TQM)**

TQM was the first formal framework of a formal QMS. It is a strategy that began in the 1980s for implementing and managing quality improvement activities at all levels within an organization, based on the philosophies of Deming and Juran as the focal point. These philosophies were based on quality values that management would like to implant in the organization. In the effort to achieve this implantation a series of tools and techniques were developed as shown in Figure 1. However, leaders who had little or no knowledge about its vital concepts such as Zero defects, Value Engineering, Quality is Free, and so forth wrapped TQM around several ineffective programs and disaster was the net result.

**Current Frameworks**

In the quest to remain competitive in the growing world economy, and having learned lessons from the failures of TQM, the need for a sustainable QMS framework is now well-established. Firms developed their ideas and practices of Quality Management within two main frameworks (Angel et al., 2010) on one hand, through the implementation of a standard QMS, the best example of which may be the ISO 9000 quality standards series; and on the other hand, using the scheme provided by the excellence model. In general, various literatures and studies in this academia have provided considerable empirical evidences on the positive impact that the adoption of various QMS and models has had on various dimensions and measures of organization’s performance (Samson & Terziovski, 1999; Prajogo & Sohal, 2006; Tari & Sabater, 2006).

*Figure 1. Total Quality Management (TQM)*

![Total Quality Management (TQM)](image)

*Note: The techniques and tools in the figure are just examples and not a complete list. In the same way the values may also vary a little between different organisations and over time*

*Source: From Hellsten and Klevsjö (2000)*
Towards the Implementation of Optimal Train Loading Plan in the Athens-Thessaloniki Freight Services
www.igi-global.com/article/towards-the-implementation-of-optimal-train-loading-plan-in-the-athens-thessaloniki-freight-services/177231?camid=4v1a

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