



## Total Quality Management and ERP - CANIAS ERP

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*While preparing this article on the relationship between TQM and ERP, I first researched the current literature relating to this topic. I was surprised to find out that few articles exist about the relationship between the two concepts. Running mutually exclusive web searches on keywords "Total Quality Management (TQM)" and "Enterprise Resource Planning (ERP)" brings up numerous sources of definitive information. However, little content seems to be available where these two subjects are treated together. Yet in practice, what may seem at first to be two separate concepts in fact go hand in hand. The reasons why these two concepts are still being treated separately could be the subject of another article. What I would like to emphasize in this article is that, for organizations applying or targeting Total Quality Management (TQM) in their businesses, Enterprise Resource Planning (ERP) software has become an essential necessity.*

*Let's explore the relationship between TQM and ERP by analyzing through comparison the fundamental principles at the roots of these two concepts.*

### **Customer Focus**

Customer focus ranks first among the basic principles of total quality management. What customer focus connotes can be summarized as the understanding of customer needs and expectations, and the continuous effort to increase customer satisfaction. When we examine the advantages brought on by the use of ERP systems, we observe the same device occupying the first place. Some of the advantages resulting from a successful ERP implementation are minimization of disaccords by creating records of all communication with the customer, organization's enhanced ability to listen systematically to what the customer is communicating, faster response to customer requests, and increased quality in the services offered to the customer.

### **Teamwork**

Again, according to total quality management basics, full participation in the business processes must occur in the organization, and those processes must be embraced through teamwork. In any ERP implementation, the starting point involves the definition of the

processes and the formation of an interdepartmental project implementation team. The primary goal of teamwork is for the business to be grasped in whole as a single entity by all departments and personnel, and thereby being able to focus on the main processes, instead of getting lost in the disconnected sub-processes. In a successfully realized ERP implementation, all departments better understand the needs of each other. Because data exchange takes place through a central database, and does so mostly without manual intervention, the accuracy of the data and its reliability increases. As a result, the corporation is coerced to conduct its business not as a collection of independent departments, but as a unified team.

## **Continuous Improvement**

Continuous improvement, another basic principle of total quality management, is an inherent consequence in an organization where ERP software is in use. For an organization that has made the appropriate choice in their ERP system, the associated best practices are, in a sense, acquired for free. The maintenance of the ERP software and installation of new releases on an orderly basis further assures that the system promotes the evolution of the organization in a continual fashion.

## **Relationships with Suppliers**

Maintenance of up-to-date and reliable information on suppliers, and assessment and evaluation of suppliers also constitute important aspects of TQM applications. Most ERP systems provide support for associated functionality through dedicated modules.

## **Accurate and Reliable Data and Statistical Analysis**

To achieve total quality management, it is critical to be able to collect, analyze and assess in a systematic method such information as production data (product trees and route information), quality control criteria and associated values, customer complaint records related to products, and job order data. Within today's accelerated production environments, it is next to impossible to accurately and reliably achieve these tasks without the use of an advanced ERP system.

## **Conclusion**

Today, for organizations that embrace total quality management as a management approach that goes beyond simple certification and for those that actively apply it in their businesses, investment in ERP software is an essential necessity. Not using an ERP system will result in a much costlier task to implement total quality management in the organization. For those businesses that have not yet started TQM and ERP implementations, starting both simultaneously and treating them as integrated projects will allow organizations to attain the best returns. For businesses that are at the ERP selection stage, I suggest making a choice under the guidance of TQM principles. It is not sufficient for the system they choose to meet the present needs of their organization. In light of continuous improvement, they must be convinced that their ERP system of choice will be able to meet their future needs as well. The software must also be flexible, and have the infrastructure that will allow it to keep pace easily with revisions in the business processes. Additionally, working closely with a consulting team that is well versed in TQM and ERP requirements is key among factors for success.

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