

QUALITY AND SAFETY CONDITIONS FOR CUSTOMER SATISFACTION ON THE WHOLE MEAT CHAIN: THE ORGANIZATION OF QUALITY COMMUNICATION SYSTEMS

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Abstract

A focal point for the organizations is the customer satisfaction, for this reason the food organizations are using the Quality Management Systems on the food chain to achieve the customer satisfaction. Quality Management Systems have many commonalities, therefore is possible to somehow communicate them. In order to build strategies, an organization may decide to implement TQM and BSC. They provide an easy to use mechanism for the selection and coordination of other management tools, as HACCP and ISO 9000 systems, throughout the entire food chain with the purpose of manufacturing safer, quality food products. The application of HACCP within an ISO 9001:2000 quality management can result in a more effective food system. The possibility to link commonalities and the communication between the two systems has been shown in the ISO 15161 and other guidelines. This paper explores the strategy management concept as a platform for improve communication between Quality Management Systems.

Keywords: strategic management, communication systems, meat chain

1. Introduction

Customer satisfaction is a focal point for the organizations. The organizations are using the Quality Management Systems (QM-Systems) to achieve customer satisfaction on the food chain. But in the recent past, a number of management systems have been developed. QM-Systems have many commonalities, therefore is possible to somehow communicate them. An option to this communication can be analyzed by using the conceptual bases of strategic management. Furthermore strategic management has some similarities with Total Quality Management (TQM) and the Balanced Scorecard (BSC). TQM and BSC help to identify an assessment methodology for organizational processes in food organizations. This paper discusses some of similarities of strategic management with other management systems (BSC and TQM), and how their commonalities establish communication linking them with each other. This relationship enhances the importance of quality and safety on the food chain, in order to be able to offer all customers quality food products. In this way, the utilization of a management systems combination such as International Organization for Standardization (ISO 9001) and the Hazard Analysis Critical Control Point (HACCP) in the food industry could improve the quality and safety of the food chain as a whole.

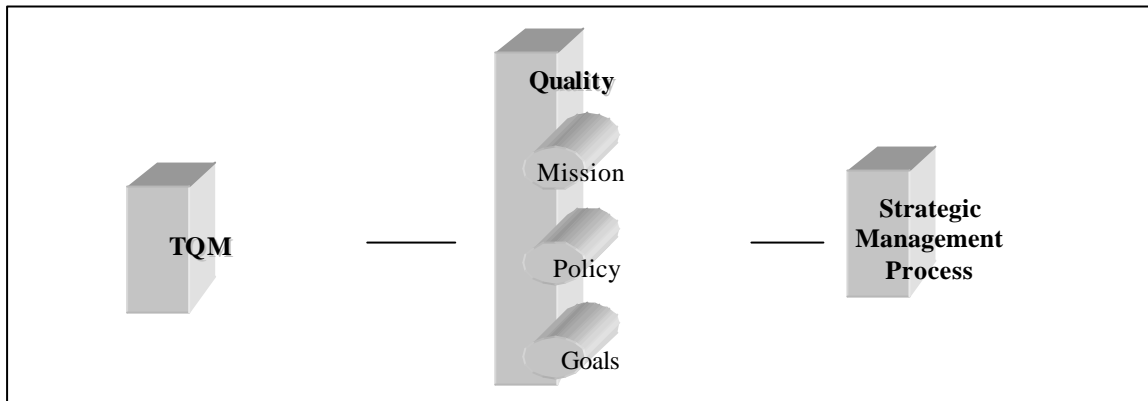
2. Strategic Management as a basis for communication among TQM and BSC systems

Strategic management is the process conducted by members of an organization in order to define goals and objectives, and to implement strategies to accomplish them. This process additionally entails planning activities, as well as collecting and evaluating their results, in order to make it possible to improve those processes that will ensure the success of

the future of an organization. The literature supports that strategic management and communication with other management systems have been thoroughly researched for many years (Kaplan and Norton, 1996; Leonard et al., 2002; Yong et al., 2002).

2.1. *Communication between Strategic Management and TQM*

According to Pfeifer (2002), the strategic management process could be more effective with total quality focus. This concept represents the establishment of a quality mission, the development of a quality policy and the implementation of quality goals in an organization figure 1. The goal of these activities is to do the quality focus in an integral part of the organization overall strategy.



Since TQM is a collection of methods to build quality into products and processes, it requires a fundamental understanding of customer satisfaction, continuous improvements for reducing rework, constant measurement of results and closer relationships with suppliers. The results of combining TQM and strategic management could increase the success of their implementation and integration into an organization's culture and practices. Strategic management and TQM have several similarities. Both: Require management support, imply a long-term fundamental change process, clarify the goals of the organization, have a goals that is translated into the operation of the organization and develop strategies and objectives for achieving the goal (Staggs, 1999).

2.2. *Communication between Strategic Management and BSC*

BSC is a methodology derived from performance measures (PM) systems. BSC should be derived from strategy and that it is the process of ensuring the successful implementation of an organization strategy that leads to the achievement of goals and objectives. BSC plays an important role in translating corporate policy and strategy into results to make the process management profitable figure 2. In this way, an organization creates an efficient and effective BSC system to translate its goals into clear, measurable outcomes for successful process management. BSC is a concept for developing an individual measurement for an organization. Essentially, its main rationale is to provide a perspective concept. BSC is a model for improving an organizational process, and develops PM that consists of four perspectives, learning and growth, internal business process, customer, and financial. Organization performance can be assessed on the bases of its four perspectives. BSC is considered to identify the key elements of an organization strategy, and to establish measures that drive the organization's overall performance (Kaplan and Norton, 1996; Pun, 2002).

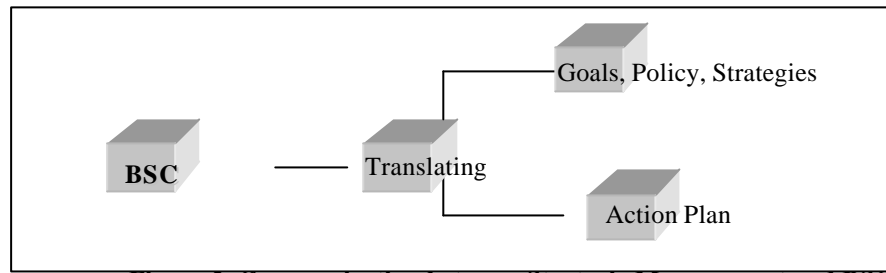


Figure 2. Communication between Strategic Management and BSC.

2.3. Strategic Management communication platform for TQM and BSC

The strategic management process is the first step taken to start process management. A strategic management process begins by defining organization goals and objectives. On this basis, it is possible to adopt TQM methodology to establish a quality focus as an integral part of the organization, by means of the implementation of quality goals, quality policy and quality strategies. Subsequently an organization may decide to implement BSC to translate these goals, policy and strategies in Actions Plan. On the figure 3 is shown the communication among the management systems.

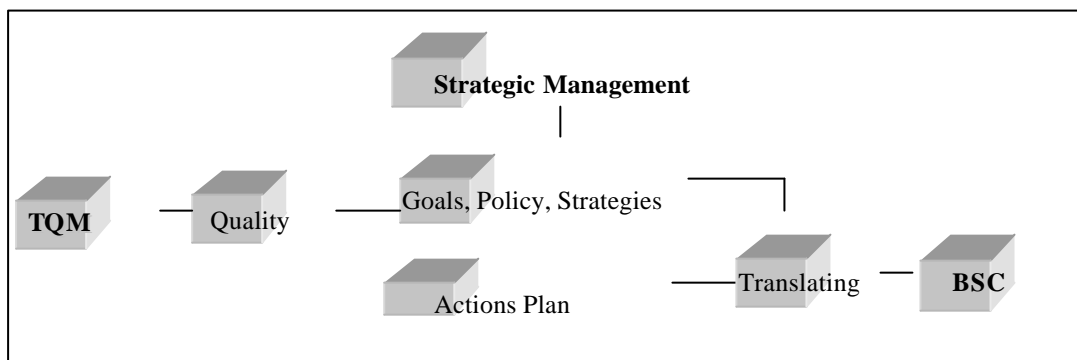


Figure 3. Communication among Strategic Management, TQM and BSC.

On this form both concepts, TQM and BSC, have many commonalities figure 4. BSC and TQM provide an easy to use mechanism for the selection and coordination of other management tools being applied in the pursuit of the company strategic goals. In conclusion, both BSC and TQM work very well when are used in conjunction with existing management processes and the strategy management plays a roll as their platform to improve the performance of an organization (Kaplan and Norton, 1996; Staggs, 1999; Kanji, 2002).

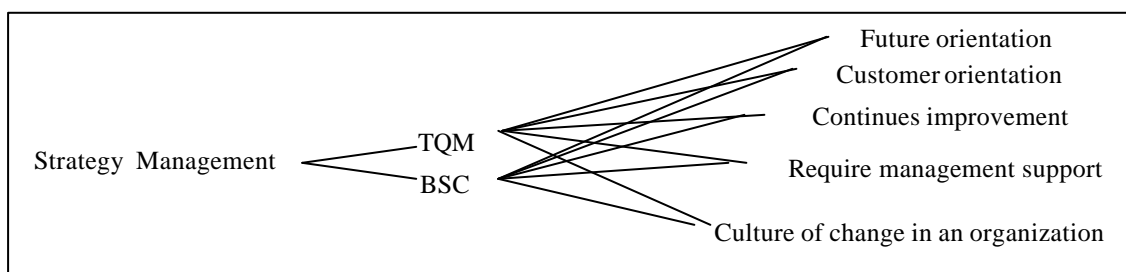


Figure 4. Commonalities among Strategic Management, TQM and BSC.

3. Quality management systems in the food chain

The appearance of diseases and contamination of animal products and other microbiological contamination scares in the food chain, have led to rising public interest for food safety worldwide. The impact of these scares on consumers is a large concern for food organizations. In order to be more prepared, the consumers strive to have more complete information on the sources of inputs in their products, because consumers are becoming more worried about this. On this way their pressures are placed on food production for variety, quality, and safety, which are affecting the food organizations. Therefore, this effect is pressing for more competitiveness on food organizations, and this competitiveness will soon be more dependent on the consistency of the production procedures as well as safety, quality and their communication in the entire food chain (Lunning et al., 2002).

The Hazard Analysis Critical Control Point (HACCP) ensures the safety, whereas the ISO 9001 system is focused on ensuring the quality. By implementing the HACCP and ISO 9001 system throughout the entire food chain in order to manufacture with safety and quality food products, food organizations assure quality and safety at all levels and therefore more competitiveness. The application of HACCP within an ISO 9001 quality management system can result in a food system that is more effective than the application of either ISO 9001 or HACCP alone, leading to enhanced customer satisfaction and improving organizational effectiveness (Sparling et al., 2001). In 2001, in order to facilitate the implementation of HACCP and ISO 9001 in food organizations, the International Organization for Standardization (ISO) has published the guidelines on the application of ISO 9001:2000 for the food and drink industry (ISO 15161:2000). These guidelines give an interpretation of how ISO 9001 could be applied on a food organization and are designed for organizations involved in all aspects of food industry. ISO 15161:2000 includes sourcing, processing and packaging food and drink products and explain the possibility to link the commonalities and the communication between the two systems. It is important to consider, that ISO 15161 is not a HACCP standard and cannot be a reference document at certification, but these guideline is intended to provide a clear management system supporting HACCP controls for an effective food safety system, under the recognized framework of an ISO 9000 Quality Management System. The International Organization for Standardization has advanced on its works for quality and safety of food products with the publication of the ISO 15161:2000. At the end of 2004, ISO will publish the standard ISO 22000 "Food safety management systems-Requirements". These two standards are quite different. ISO 15161 deals with all aspects of food quality and shows how the HACCP system can be integrated into a quality management system. On the other hand, ISO 22000 concentrates exclusively on food safety and will instruct food producers how they can build up the food safety system itself (Petro-Turza, 2003).

3.1. Customer importance on the whole meat chain

In order to facilitate an efficient quality and safety, the company needs to know and understand the necessities of the customer requirements on the whole food chain, and the difficulties in discerning requirements and measures of each level of the food chain, particularly in the meat chain (Schiefer, 2002). By means of the Balanced Scorecard, it is possible to align strategic objectives with customer priorities.

Table 1.
Attributes classification on the whole meat-chain.

Measure categories	Meat Chain					
		Input Industries	Agricultural Sector	Processing Industries	Retailers	Consumers
	Process	-Ingredient storage records	-Method of livestock breeding -Intensity of feeding	-Slaughtering methods (cleaning, disinfecting) -Cooling methods	-Cooling methods	-Hygienic and quality process
	Product	-Origin of grains -Traceability	-Hygienic status of breeding -Age/weight -Traceability	-Hygienic status of meat -Traceability	-Adequate packing -Traceability	-Color and taste of meat
	Desired Outcomes	-High quality grains	-Natural breeding -Animal welfare	-Animal welfare	- Long shelf life	-Meat safety -Nutritional quality
	Undesired Outcomes	-Use of chemicals -Dangerous substances	-Use of antibiotics -Use of hormones	-Use of synthetic additives -Microbial growth	-Color and texture deterioration	-Chronic disease -Morbidity

For Lawton (2002), a good application of the Balanced Scorecard reflects priorities of customers and it starts by developing measures related to process, product and outcomes. The Process is how the work is done related to the characteristics customer wants. Product refers to what customers receive on the basis of the waiting attributes. Desired outcomes are what the customer hopes to obtain, and undesired outcomes are what the customer want to avoid or eliminate. An example of some attributes of contracts in European meat chain adapted from Kagerhuber (2000) and Lawton (2002), where the attributes are classified on different measure categories (process, product and outcomes) and attributes could be assumed how the characteristics hoped for the process and products, is shown on the table 1.

4. Summary and Conclusion

The evolving requirements of a modern food safety and quality system are a challenge to organizations. This unique set of circumstances requires companies to enter into more interdependent relationships with other participants in the food chain. On this way, a creditable guarantee for safety and quality on their products can be offered to the customer (Becker, 2002).

The interaction extent (complexity) of the Quality Management Systems at each level of the meat chain is showed on the Figure 5. The main points that the different systems have in common (communalities) could placed on a “box” with the main guidelines including all necessary information and thus shows the communication among systems, facilitating the incorporation of different QM-Systems and its application on the meat chain.

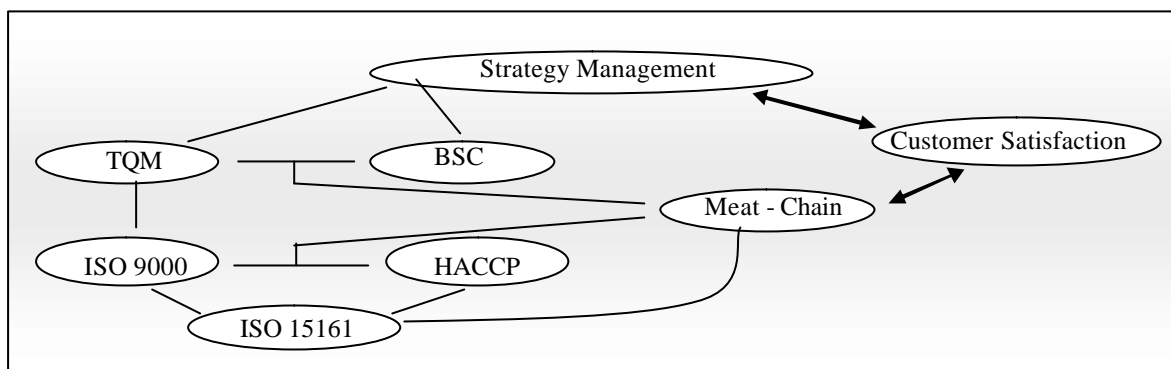


Figure 5. Communication of Quality Management Systems in the meat chain.

Therefore, the communication among the different Quality Management Systems and understanding needs of the customer, and how they can be measured, will be the most effective and efficient means of delivering with safety and quality food products for the whole food chain (Lunning et al., 2002).

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