

The Advantages of the Process of Integrating Quality Management System

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Abstract: *This paper is based on a summary of new trends in the theory of integration of management systems, including quality management system. Analysing the potential benefits that show how, in terms of management, quality must be a permanent correlation with the environment, occupational health and safety, risk, etc. education and consumer protection, integration management becoming a new strategy for any organization based on transparency, efficiency, integrity. The integration of Quality Management System is a complex activity, but necessary, which involves multidisciplinary approach, culture of quality and accountability. Quality Management System (QMS) can be integrated with Environmental Management System (EMS), Occupational Health and Safety Management System (OH & SMS) Risk Management System (RMS) etc.*

Keywords: *Integration, Integrated Management Systems (IMS) Quality Management System (QMS)*

Introduction

Integration of management systems such as for quality, environment, occupational health and safety, risk management, and corporate social responsibilities is a viable organisational approach to cost reduction, efficient utilization of resources, greater motivation of employees, and better compliance to social obligations and stakeholders' requirements. Identification of drivers for corporate motivation for IMS decision making and its implementation is a matter of interest for academicians, practitioners, industry, and government regulatory agencies; paradoxically literature on this subject is pretty thin. This paper describes the literature review and research agenda for the exploration of drivers of IMS implementation and factors influencing IMS implementation.

This approach is motivated by the integration advantages:

- The publication of the new edition of ISO 9001: 2015 which contains new requirements for quality management system for increasing stakeholder confidence that the organization expects of management transparency, integrity and security. (Annex SL, known as "High-level structure" implies a structure identical basic text and a set of 21 basic terms and definitions common to all standards for management systems);
- Increase in the number of certifications based on ISO 9001, ISO 14001;
- Adding value by implementing both integrated systems and through audit and certification;
- The need for managerial culture change.

We are facing new generations of integrated management systems based on performance management, knowledge management, collaborative management, ethical management, etc., requiring the adoption of a responsible attitude to take into account the consequences of the acts and decisions. The benefits of joining multiple management systems are supported in the literature by more and more authors.

1. The Context of the Integration of the Management Systems

The existence of multiple standards based on ISO 9001 model (which can be varied in patterns specific industries or services), then the model for environmental or health and safety at work, information security management, risk management, ethical management etc. It provided a comprehensive framework and a set of models that each organization may wish to implement it.

Suciu & Oprean [24, 69] I believe that "though these systems were created as independent systems and can be implemented as such, these standards have the same fundamental principle originally, that is the continuous improvement principle stated by Deming (PDCA), and many other common elements. It was born so, step by step ... the idea of integrating these systems. "The same authors also refer to the concept of global quality management systems integration by proposing competitive technique" particularly effective to incorporate requirements already required in the current context, when the organization must be aware that should satisfy all stakeholders in its development" [24, 70].

The current approach, quality management borrows old patterns, but also refers to new areas as well - social quality (including quality of life and working conditions, quality of education, quality of people, societal responsibility, etc.), quality economic structure sustainable development, quality of intellectual products (e.g., trademarks, know-how), etc. Quality management objectives have changed geared more and more towards "consumer king" and by all stakeholders. Quality cannot be separated from manufacturer / supplier, resources, risks, work environment or natural surroundings and knowledge requirements of the consumer, organizational culture, and employee and consumer security.

Achieving the objectives of any organization carry out a set of processes directly or indirectly linked with the concept of management. 100 years ago Henri Fayol, in the book *Administration industrielle et générale*, published in 1916, made the remark: "administer means to provide, organize, command, coordinate and control". Today we look at this definition as appropriate total quality management, quality management overall, and why not integrated management.

Currently, company managers are facing several challenges: increasing economic performance under drastically limit the resources allocated increasingly severe competitive conditions in markets, increased consumer demand, an unstable legal environment, etc. These challenges require pragmatic approach of document management to top management level. One of the levers used by successful managers in controlling the quality at these challenges is the integration of as many systems management, information flow analysis and optimizing operational processes. They will have a decisive word (or who have already!) the management of knowledge, the science of sustainability, the quality education, the right to quality etc.

"The similarity of management concepts on quality and environment led at first to the adoption of the integrated management system quality-environment" [7, 38] using the ISO 9000 requirements and ISO 14000. It is becoming increasingly typical the tendency to integrate Quality Management system with the Environmental Management system and the safety and health occupational management system. "The appearance of this integrated system should not be seen in any case as a success theoretical implementation of a visionary, but as a result of constraints very real current markets and particularly the context in which coexists and works today any organization and stakeholders of products, services and activities." [15, 188]

Integrating concept, equally philosophical and strategic, the TQM is above all a management system in which the central core of the organization is policy cops strategic alternative for quality and continuous quality improvement as a part of it. Defined as "all forms of organizational, decisional, informational and motivational within the organization through which the duties and its relations" any management system should be designed, implemented given a set of prerequisites for economic, psycho-sociological, informational, legal or technical prerequisites reflecting its strong multidisciplinary nature.

Within the quality management literature, *integration* is associated with implementation and purpose of SMC / TQM and standards for the SMC with other systems. Several authors (Suciu & Oprean, Faucher Hoyle, Froman) considered them as the integration of SMC as directed by the overall quality.

"Within the context of quality management integration one might put all the internal management practices into one system or separate bringing disciplines together to work on a problem, or joining processes. It serves a particular objective" [9, 120]: "Integrated management is the understanding and effective direction of every aspect of the needs and expectation if all stakeholders equitably satisfied by

the best use of all resources." [9, 126] Froman proposes "an integrated management, harmonized or global" [7, 38].

"The company is now seeing the third generation of TQM that has given that concepts such as transparency, accountability and responsibility (social) are conjugated in the baggage of knowledge about quality management". [6, 688] This new generation is also based on "learning organization", "stakeholder theory", "the theory of attractive quality", and the science of sustainability, the participatory management but also the continuous education and information of consumer.

All these parameters are constantly changing. In these circumstances, "to achieve sustainable customer satisfaction, constant improvement of effectiveness is only possible in a continuous and dynamic process" [14, 40].

The new generations of TQM are the result of integrating the three spheres *economy, environment, social and utilization of knowledge in training (improvement) the attitude and the social responsibility*. This is an approach, a philosophy of action that respects the rules of good governance and that translates into new behaviours and a new attitude to its own facts. New directions by heading TQM shows that the organization of tomorrow will be increasingly less independent pursuing only objectives strictly private, it will be an important actor of society, environment and economy, acting within a community, outsourcing products and services by accountability. Customers, employees, stakeholders and the local community have come into focus.

2. Integrated Management System. Advantages

The concept of the Integrated Management (IMS) derives from the idea of integrating both horizontally and vertically several management systems, for example Quality Management System (QMS) can be integrated with Environmental Management System (EMS), Occupational Health and Safety management system (OH & SMS), etc. for the achievement of a single management system to manage integrated systems assimilated.

Integration of management systems, including quality is a viable approach to reducing organizational costs, efficient use of resources, greater motivation of employees and better enforcement of social obligations and requirements of stakeholders.

Integrated Management System is a component of the general management system which includes organizational structure, planning activities, responsibilities, practices and procedures, processes and resources for developing, implementing, achieving, reviewing and maintaining integration policy.

Integrated Management System is a logical and systematic management approach that allows strategic and operational decisions that take into account all the key aspects that lead to the efficient functioning of an organization. Resources, processes and procedures structure and organizational culture interact to perform tasks of planning, control, implementation, measuring, improving and auditing. An integrated management meet at least two different management systems: QMS + EMS, QMS + EMS + OHSMS etc. Integration definitions, benefits and sometimes the order of integration have been presented in recent years by several authors (Table no. 1 and Table no. 2).

Table no. 1. Some Definitions about IMS

Author	Definition
Garvin, D., (1991)[8]	"Harmonization and alignment of policies and objectives of an organization, such as they all speak the same language and departments are on the same direction."
Karapetrovic&Jonker (2003) [11]	An IMS "is a set of connected processes that share the same resources (human resources, information, materials, infrastructure and financial resources) to achieve a set of objectives related to compliance stakeholders."
Faucher, S., (2006) [5]	"An integrated system is a system that combines sequential control systems into one, by adopting the process approach and systemic approach to meet standards"
Hoyle,D., 2009 [9]	"A way to reduce risks, to make organizations more efficient"
The American Society for	"The integrated management system with respect to processes, risk and audit. Integrated processes are defined as processes management systems that are

Author	Definition
Quality (2015) [28]	<i>integrated in a high (greater than 70%), and a joint owner between processes QMS, EMS, OHSAS etc. Embedded systems have integrated risk management (eg, a common methodology of risk) on quality or environment, health and safety, food safety and are comparable in severity and evaluation of hazards to these different categories.</i>

Table no. 2. Description of Some Advantages of the IMS

Author	IMS advantages
Wilkinson & Dale (2001), [27, 330]	<ul style="list-style-type: none"> – Policy and Strategy are based on expectations of stakeholders; – The objectives are established according to political orientation; – Resources are allocated in an integrated manner to support the objectives; – Scope covers the QSE processes; – Integrated processes and planning activities consist of, the mastery of implementation, measurement, improvement and audit; – Elements arrival (results) allow meeting the demands of stakeholders; – Consider integrating continuous improvement of management systems; – In the continuous improvement process to take account of the return information from stakeholders; – Promoting participation in the organization's culture allows people participating in QSE; – The system enters interaction with the external environment of the organization.
Casadeus (2004), [2, 255, 263]	<ul style="list-style-type: none"> – Cost reduction through simplification of documentary. and procedures: – Reducing the cost of implementation and certification: – Increased efficiency due to the merging of tasks processes: – Evaluation and monitoring of SIM aims to streamline a single line of work: – Prevents taking measures unilaterally in one of the areas that can have negative or counterproductive to other areas: – Participation of the entire workforce to the correct implementation of SMI becomes easier and effective unless it is exercised in many different systems.
Karapetrovic & Jonker (2003) [11]	<ul style="list-style-type: none"> – Able to integrate all the common elements of sequential management systems; – Generic in order to be applicable to all organizations, including their management systems; – Flexible in order to meet the specific requirements of any management system; – Fully compliant with standards 2004.
Rocha & al. (2007), [19]	<ul style="list-style-type: none"> – The requirements of stakeholders are identified and taken into account; – Resources are allocated and constitute an indispensable support; – Planning, implementing work, verification and improvement are considered at trial, – Leadership is a key commitment for the organization; – The organization's values are quoted by personal motivation and is an important element for achieving the objectives; – Performance of the organization allow them to meet the demands of stakeholders; – The normative requirements are taken into account in an integrated manner at each stage; – Resources are represented as an input, but not as a support; – Model refers to chapters of rules without losing the characteristics of generic.
Hoyle, [9, 12]	<ul style="list-style-type: none"> – A quality management system is a set of interacting process designed to function together to fulfil quality objectives; – An environmental management system is a set of interacting processes designed to function together to fulfil environmental objectives; – A financial management system is a set of interacting processes designed to function together to fulfil financial objectives.
Asif & al. (2010) [1]	<p>Stakeholders are clearly defined, their requirements are taken into account:</p> <ul style="list-style-type: none"> – The strategy of the organization is based on the requirements of the stakeholders; – Management subsystems are defined to express the company's strategy and meet the requirements of the stakeholders; – A single manual for business processes is established; – Operational process procedures are integrated; – Operational processes are initiated; – The results of the processes make it possible to satisfy the requirements of the

Author	IMS advantages
	stakeholders; – Vertical and horizontal coherence creates synergy at each hierarchical level and between different activities of the same level; – Continuous improvement is not considered at the model level; – Provision of resources is not mentioned in the model.
Ruzevicius (2013) [20]	– Quality Guideline values (national, society, religion, government bodies, businesses, consumers) and quality culture (Ружевичюс / Ruževičius, 2012, 2012b); – Social Quality (quality of life, quality people, quality emotional partnership "stat-enterprise-society" societal responsibility of the organization, etc.); – The quality of economic management and governance, quality of governance, the quality of public sector organizational excellence and entrepreneurship; – Qualitative diversity of markets, services and intellectual products; – Quality of sustainable development (management systems ISO 14001 and EMAS environmental quality products and services, management fingerprints eco etc.); – Management and quality audit, standardization, certification, conformity assessment and quality and comparative product tests; – Infrastructure services quality assurance.
Simon&Duglas (2013) [22]	– Task simplification; – Increase organizational efficiency; – Organizational culture improvement; – Improvement of the systems understanding and use; – Better communication; – Higher stakeholder implication; – Company image improvement; – Better use audit results; – Organizational strategy improvements; – Better option to include new systems.
Mohamed El Khachab et all (2014) [4, 336-346]	– Improving the image of the company; – Customer satisfaction and interested parties (State, local communities ...); – Reducing the cost of managing multiple management systems; – Improve the competitiveness of the organization; – Creating synergy between different management systems; – Continuous improvement of management system; – Reduction of problems / accidents at work; – Improved effectiveness enterprise; – Optimization of labour and reduction of bureaucracy; – Optimizing communication; – Improving the efficiency of the organization.
Faucher, S (2006) [5, 188]	– Coherence; – Simplification; – Effectiveness; – Participation and involvement of staff; – Improved performance.
Abdehad, R., Daoud AÏT-KADI [18]	– The coherence of the company's strategy in terms of quality, safety, social responsibility and the environment; – Reduction of redundancy in operating procedures by improving the effectiveness of practices in the strategic, tactical or operational aspects; – Simplification of the system in terms of organization, use, and documentation.

As with any changes in case management systems integration we should expect the advantages and disadvantages.

To take advantage of the integration, the organization must overcome many constraints, such as lack of integrated management standard ISO lines with ISO guidelines for quality, environment and security. Another problem with the integration of several standards (e.g. SO 9001, ISO 14001 and OHSAS 18001) is the existence of very different areas of application [27], [25]. Quality is linked to customer satisfaction is related to personal security, environment while trying to control the negative impact of business activities to the external environment. Wilkinson & Dale, 2001 [27] wrote about the lack of a

concept of integration and the need for a cultural transformation of the organization to successfully complete the integration process. Zutshi & Sohal [26] Karapetrović [10], supported organizations inexperienced, find adequate resources and the employees who were resistance to change.

A model for integrating management systems should be based on three important principles that are found in the systems they integrate, namely [2, 255]:

- *Management's commitment* to be involved and to motivate and attract personal having responsibility;
- The preventive nature;
- IMS methodology is based on the PDCA cycle.

It is necessary and justified to motivate internal and external integration.

- Internal motivation. Synergy is one of the advantages of the IMS [19, 83-92]. In an organization it can be split into three levels [25, 1760-1767]
 - A synergic strategy;
 - The cultural synergic;
 - A documents based synergic
- External motivation. Integration of management systems significantly improves customer satisfaction [12, 67-74], [26, 211-232], [21, 1786-1801]. The approach of the management and acceptance by managers and other employees lead to interesting results in terms of customer satisfaction and improving product quality.

Some drawbacks were presented:

- a) Cassadeus [2, 263]:
 - Difficulties with qualified staff for SMI;
 - There is no single standard that includes requirements card.
- b) Faucher [5, 194]:
 - The strong commitment of the leadership;
 - Raise actors (information, communication, training, participation);
 - Characteristics / needs periods;
 - Will and perseverance;
 - Integration as needed.

In addition, the implementation of an Integrated Management System contributes to:

- Defining a uniform policy at the management level;
- Vision on long-term development;
- A unified vision of all the procedures required to be applied by emphasizing common procedures and specific procedures;
- Simplifying existing management systems;
- Increase the benefits of each system;
- A consistency and continuity in running the 2-3 steps for certification systems, based on an integrated management policy;
- Reducing overall the deployment time;
- Consumption optimization of resources used;
- Establish processes, environmental issues, quality requirements for the products and services, identifying and / risk assessment;
- Establish priorities, objectives and individual in each process / person;
- Establish uniform conditions for planning, control, monitoring and measurement, and verification audit corrective / preventive actions;
- Identifying legal and regulatory requirements for all integrated;

- Adapt easily to all market changes, customer requirements, new trends and not least the EU requirements.

Conclusions

In conclusion, the Integrated Management System is a relevant model, organized, coherent and evolving, enabling adaptability, responsiveness, and possession and risk management. The integrated system management as a new dimension of the organization is based on social responsibility and professional performance and sustainable development.

We had in view that management systems are a powerful lever for progress and balance and of searching for building intelligent organizations with stakeholders. Priority is now the mobilization and the urging of the actors involved in the management systems (including quality), increasingly evolved. By integrating QMS, EMS, OHSAS and other systems there is the possibility to achieve improved communication between the various departments of the organization and thus a better cooperation through work processes and not only in the process of functions. To strive towards excellence it is also necessary to include non-standard systems such as the one for accounting, one for innovation, manufacturing, logistics etc.

The need to integrate quality management system with other management systems proves that quality management is moving towards new generation of management, when accountability and responsibility are extended beyond the traditional focus organizational include a broader social and business [16, 157]. It is more correct to talk about integration into a single system of operation of all components of the organization: quality, security, environmental, social, and financial and not an "integrated management". By integrating all these components and issues we reached the interaction of three spheres: economy, society and environment, so sustainable development. Moreover, many quality scientists (Stanciu, Monin, Faucher, etc.) agree with the definition of total quality as a policy for integrating and mobilizing the energies and knowledge, which means the three spheres complexity of relationships and a participatory management strategy and empowerment. This means to increase customer satisfaction, quality of life, as a "strategic necessity". [13, 37]

Of course, there still more things to be done in order to harness the benefits of the IMS. We think of innovation management, risk management, information security management, social responsibility, etc.

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