

STUDY ON THE IMPLEMENTATION OF THE INTEGRATED MANAGEMENT SYSTEMS IN TWO ROMANIAN COMPANIES

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Abstract: The purpose of this study is to highlight the design and implementation of Integrated Management System Quality-Environmental-Occupational Health and Safety in two companies in Craiova, both with entirely Romanian private shareholders. It makes a comparative analysis of the level of integration of these management systems, focusing on the advantages and disadvantages of integration related to the management efficiency and the company's competitiveness.

Keywords: Integrated Management System, level of integration, competitiveness

1. INTRODUCTION

The constant need of organisations to continuously develop their operations, competitiveness and efficiency has resulted in the need for system thinking. Fulfilling the diverse requirements of various stakeholders requires different approaches. The constant increase of these requirements has highlighted the need for a systematic approach to handle them. This has led to a significant increase in the development of management systems (MS).[1] Different management systems offer an operating framework and procedure and simultaneously support continuous improvement. These systems often share resources, processes and stakeholders, suggesting that integrating them could be beneficial. “The integration of systems/standards is one of the major strategies for ensuring survival and savings (time, cost, resources) for the organizations in the twenty-first century”[3].

Integrated management systems (IMS) are being implemented at an exceeding pace, the most important motivations according Zeng et al. [9] are satisfying customer requirements, responding to government appeal and remaining competitive. The most commonly integrated management systems are

quality, environmental and occupational health and safety standards. They are often based on widely used standards such as ISO 9001, ISO 14001 and OHSAS 18001 that include common characteristics and starting points, which make them relatively easy to integrate. [6]

Yearly surveys on the application of ISO management system standards (MSSs) show a steady worldwide increase in certifications based on ISO standards mentioned above. However, while these surveys do not indicate the size of the organizations that have implemented the standards, it's a reality a growing number of small to medium-sized enterprises (SMEs) implement multiple MSSs, though some face difficulties in doing so and need help[2]. The main reason is that many SMEs are suppliers to large companies that impose quality and environmental requirements on their supply chain. In many cases, these requirements can only be met by implementing a management system and being certified. Also, governments apply quality, environmental and even sustainability criteria in their purchasing and procurement activities. SMEs are therefore forced to implement quality and environmental management systems to stay in business.[7]

2. INTEGRATION MODEL BASED ON ISO 9001

The word integration is often considered to refer to the joining of individual components into one whole. Different organisations have significantly different viewpoints on integration and integrated management systems.

The most commonly used integrated management systems are environmental, occupational health and safety, and quality. There is no common, universal integrated management system, but integration must originate from the objectives and aspirations of the organisation in question. The organisational culture and atmosphere must support the goals of integration and the work towards

the combination of different managementsystems. [5]

Management models are standardised tools that can be used to implement and evaluate a management system. Three main types of models are given in the speciality literature:

- The European Foundation for Quality Management EFQM model,
- Integration model based on ISO 9001 and
- Integration model based on ISO 14001.

Most of the romanian companies follow the integration model based on ISO 9001. This model requires building IMS based on ISO 9001(Quality Management) and then adding environmental and other relevant elements as shown in Figure 1.

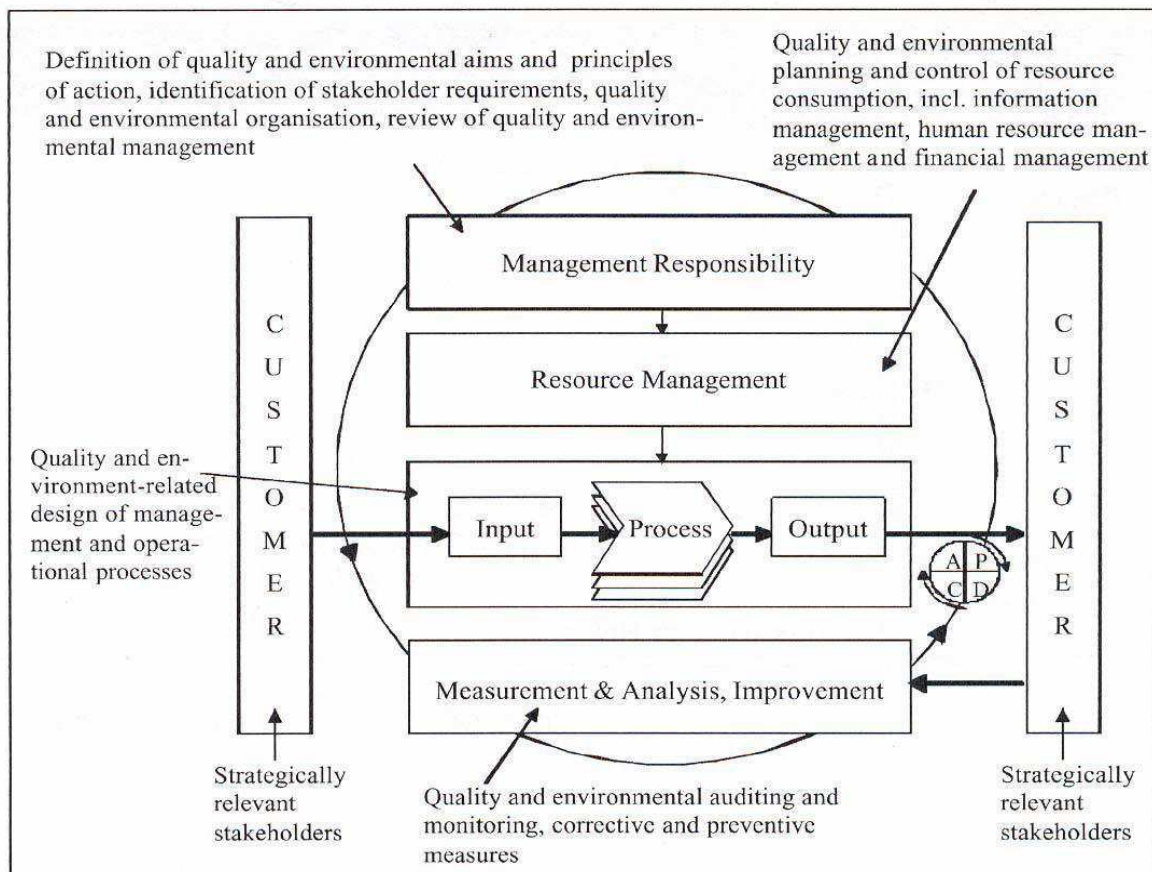


Figure 1. Integration of quality and environmental elements based on an integration model of ISO 9001 [4]

3. RESEARCH METHODOLOGY AND PROFILE OF THE COMPANIES

Design/methodology/approach- This paper presents the experiences of two Romanian-based organizations that have successfully undertaken the integration of their management systems/standards. Data for this paper were collected through in-depth interviews conducted with the managers responsible for quality, environment and OHS systems.

The two companies involved in this study were selected based on previous contacts with the managers from the chosen companies. After re-establishing contact with the relevant managers and informing them of the objectives of the study, interviews were arranged. The finalized case studies were cross-analyzed for similarities and differences relating to the various aspects of integration. Some input data regarding the two companies, necessary for the study are given in Table 1.

Table 1. A brief overview of the two companies interviewed

Companies	S.C. RURIS IMPEX S.R.L	S.C. POPECI IUG
Sector	Industry	Industry
No. of employees	46	727
EMS implemented	2009	2008
QMS implemented	2008	2008
OHSAS implemented	2010	2008
Integration started	2008	2008
Drivers for integration	Better use of resources Achieve cost savings	Better use of resources Remaining competitive

The two companies represent different industry sectors but both are with entirely Romanian private shareholders. Both companies implemented their EMS, QMS and OHSAS systems at about the same time and also initiated the integration process at about the same time. The key driver for integration the two companies was to make better use of resources.

The analysis of some economic indicators (table 2 and 3 and figure 2, 3, 4, 5) shows the levels of integration and its benefits for the two companies. It is obvious the low, but steadily level for the profitability rates of Popeci company until 2012, followed by a slight decrease in 2013 and 2014, while in the same time

Ruris had a dramatic decrease, followed by a slight increase. An explanation of this evolution could be the influence of the economic crisis as well as challenges commonly experienced by companies integrating their management systems:

- People's attitudes: some resistance which can generally be addressed by educating and training the employees;
- Lack of expertise and use of consultants: additional costs, because of the high fees charged by them and the disadvantage of not assist the organization in maintain the system
- Continually changing regulations and guidelines
- Time-delays in integration.

Table 2. Economic Indicators for Ruris Company

COMPANY	RURIS						
	YEARS	2009	2010	2011	2012	2013	2014
TURNOVER		10201919	13201819	20336524	17842428	18627757	30178251
NET PROFIT		1195405	928398	1464032	14129	552576	996932
TOTAL EXPENSES		9277269	13107813	20118479	21207653	19315080	30008752
PROFIT RATE		11.72	7.03	7.20	0.08	2.97	3.30
PROFITABILITY RATE OF RESOURCES CONSUMED		12.89	7.08	7.28	0.07	2.86	3.32

Table 3. Economic Indicators for Popeci Company

COMPANY	POPECI Utilaj Greu						
	YEARS	2009	2010	2011	2012	2013	2014
TURNOVER		52880941	41071942	81784790	76504983	71136574	79759528
NET PROFIT		1672595	1478892	3093758	2791761	1369508	732288
TOTAL EXPENSES		51705414	56623564	78559791	83844469	88636289	84812442
PROFIT RATE		3.16	3.60	3.78	3.65	1.93	0.92
PROFITABILITY RATE OF RESOURCES CONSUMED		3.23	2.61	3.94	3.33	1.55	0.86

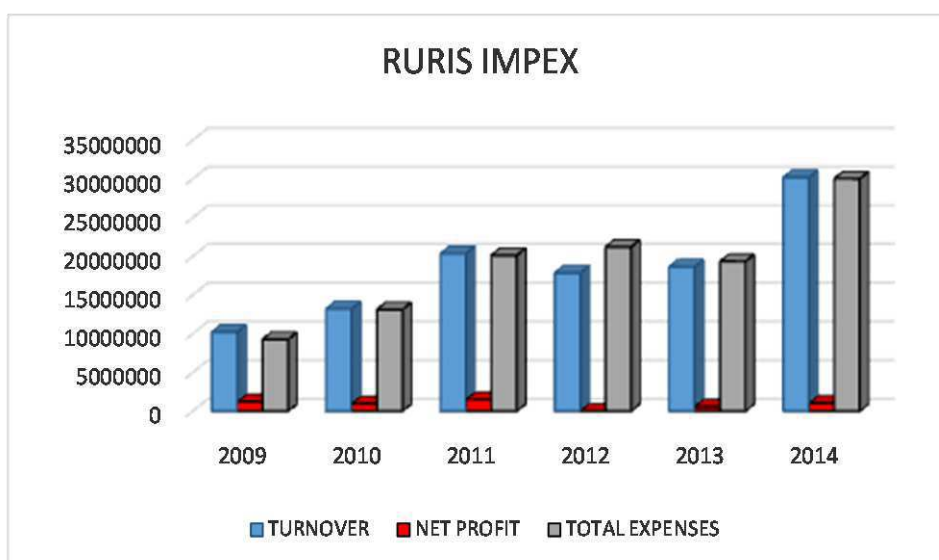


Figure 2. The economic indicators for Ruris company

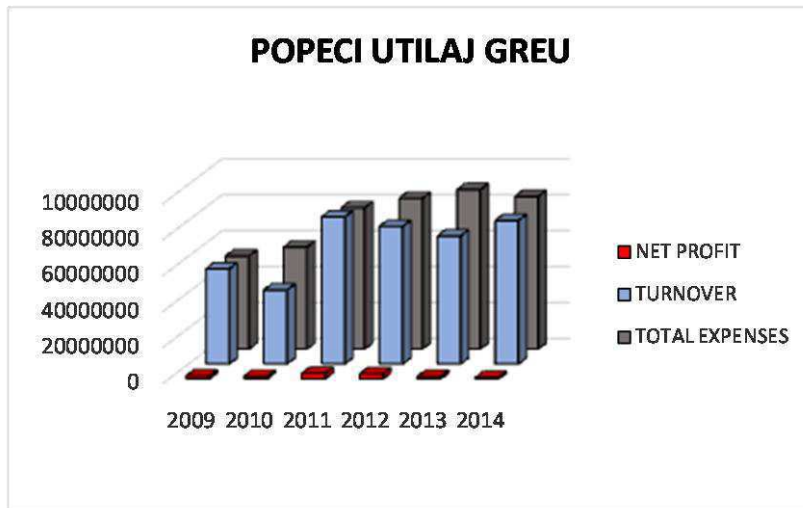


Figure 3. The economic indicators for Popeci company

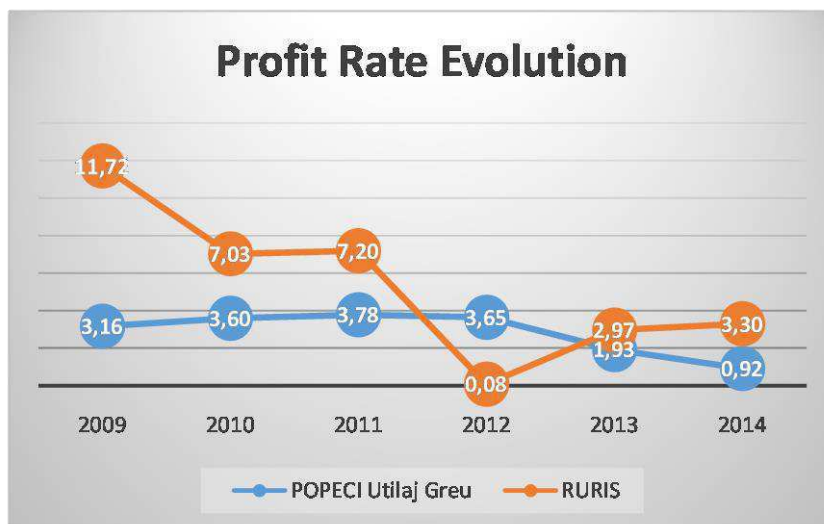


Figure 4. The profit rate evolution for both companies

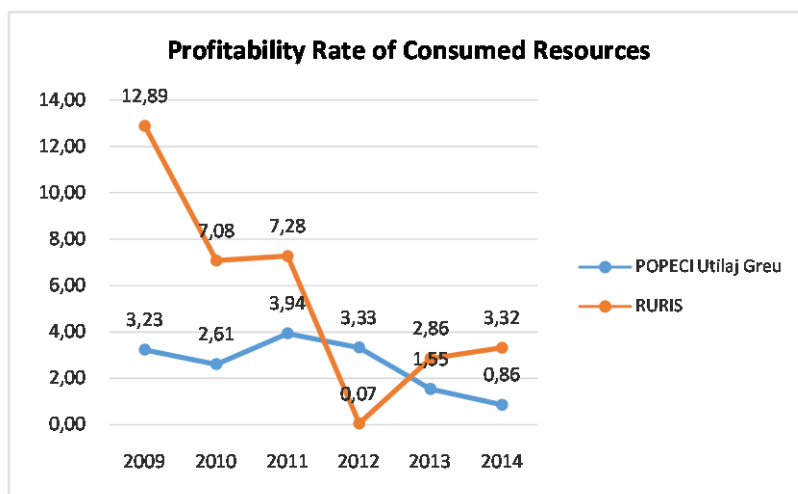


Figure 4. The profit rate evolution for both companies

4. CONCLUSIONS

The greatest advantage of integration is the opportunity to decrease the number of overlapping systems. Decreased documentation, registration, bureaucracy and paperwork will result in saving time and resources: the aforementioned processes are optimised and both internal and external audits will become less complex. An additional benefit is that targets and responsibilities for different integrated areas of operation are determined in one place and on the basis of one management system. According to [8] change must penetrate all levels of the whole organisation. It must not remain a mere nominal change within an organisation and integration of operations.

The findings reveal that both companies support an integration of the ISO 9001, ISO 14001 and OHSAS 18001 standards. “Similarity” and “compatibility” between these standards are considered as the main reasons for pursuing such an integration. The benefits resulted from the integration include “avoidance duplication of procedures”, “reduced conflict of procedures”, and “reduced requirements for resources”. The research also finds that organizations need technical guidance and support from certifying bodies to complete the integration. This wouldn't be possible without top management commitment in all phases of the integration process and the organizational culture to embrace change.

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