Introduction to integrated management systems ims management essay



Figure 2. PDCA cycle on ISO standards common clauses (based on Berckmerhagen, Berg, Karapetrovic and Willburn, 2002: 216; British Standard Organisation 2008: 18-19 and Stolorz, 2008) 5

Executive Summary

This paper is a report on implementation and integration of management systems commonly used as separate standards to achieve effective internal and external performance. As research indicates, obtaining a certification in various standards, having as a basis ISO 9001, it is just a beginning of the improvement of overall system implementation.

Introduction to Integrated Management Systems (IMS)

Constantly growing markets and customer expectations are the reason of craving to achieve a certain level of product's standards, reliability or conformance. There is a need to have appropriate systems implemented.

Integrated ISO Standards

One of the most common and basic solutions to start with is ISO 9001. Used for many years is now the basis of any quality systems in industry. Two other commonly implemented are ISO 14001: 2004 – Environmental standard (EMS) and ISO 18001: 2008 – Health and Safety standards (OHSAS). These three together are now combined in Integrated Management System, that covers three very important areas of industry performance: product quality, environmental standardisation and safety standards. There are however many other that can be integrated with these mentioned above – all of them or some. Figure 1 represents a simple explanation of possible standards to integrate.

Figure 1. Standards in IMS (Stolarz, 2008)

Having these standards is very crucial to be relevant in the market of manufacturers, suppliers and finally – customers. That still causes problems within organisations. Having three different systems, or more, that are commonly known for being procedure-orientated, demands a wide range of management activities, well suited documentation and audits.

It was however confirmed, that having all systems separately is a big challenge to handle. (Zeng, Tan, Le, 2010: 172) It is mainly caused by overwhelming amount of procedures, control systems and people involved in each system management. Having it somehow "centralised", would simplify tasks and make all systems easier to understand not only to top managers, but also all employees.

Reasons for integration

The question "why to integrate?" should be set for every company that has more than one standard implemented. Currently organisations introduce ISO 9001 and EMS as basics, with further OHSAS gaining. The main objectives of integration are:

Providing a "big picture" of company's performance

Reduction of the effort put in each standard separately

Cross-disciplinary approach (Carter1999: 60)

What is more there is a constant pressure from various stakeholders to improve the standards performance. (Zutschi, Sohal, 2003: 212)

Methodology

Integration can be done in two ways. The first one relates to similarities in each introduced standard, by finding compatibilities. The theory indicates however, that it is not the best perception of systems integration. The second method of focusing on " integration through a Total Quality Management could offer more substantial benefits". (Wilkinson, Dale, 2002: 286) It also takes into consideration a culture of the company, people's abilities and a condition of a particular organisation.

The integration process is however very dependable on various factors, like a company's complexity, or a relevance of environmental issues to organisation's performance. (Zutschi, Sohal, 2003: 214)

What is more, integration can be done in several ways. The most common is to implement QMS first, then integrate it with EMS ans OHSAS systems. However there are many methods of delivering this activity, shown widely by Zutschi and Sohal. (Zutschi, Sohal, 2003: 217)

Systems compatibility

Taking into consideration all similarities in ISO standards, there can be six main clauses outlined. These compatibilities are however determined as in norms, saying that "common elements (...) can be implemented in a shared manner in whole or in part (...) without unnecessary duplication or the imposition of conflicting requirements. Compatibility does not mean that the text or the common elements of the standards needs to be identical, although they should be whenever practically possible." (Wilkinson, Dale, 2002: 285)

Below are therefore six commonalities between ISO 9001 and ISO 14001 shown. They are based on the Deming's PDCA cycle methodology and presented in such form. Furthermore there are tables with all commonalities, later described in detail. (British Standard Institution, 2004; British Standard Institution, 2008 and Stolarz, 2008)

Management devotion – this clause relates to both policy creation and a later stage of management review.

Aims and objectives – both standards have specifically outlined an obligation to have objectives well set.

Human resources development – due to PDCA methodology, constantly improving skills and qualifications within an organisation is crucial to every standard.

Management of documents and procedures – both standards relate to proper procedures setting with a specific control of documents. Documentation, system and process procedures are one of the most crucial parts of each standard.

Documentation of records – apart from having documents under control, it is vital to register all records within an organisation.

Control, measurement, analysis – as part of the process, measurement procedures have a wide impact on the whole standard. Both of them state clearly about the importance of established control systems.

The figure below represents the PDCA cycle with outlined common clauses and compatible parts of standards.

Figure 2. PDCA cycle on ISO standards common clauses (based on Berckmerhagen, Berg, Karapetrovic and Willburn, 2002: 216; British Standard Organisation 2008: 18-19 and Stolorz, 2008)

Further implementation possibilities

Having many examples of IMS implemented, it is very good to outline other systems, that can be combined with this management system. Industry practice shows various combinations of system introduced. These are as example:

HACCP system

SA 8000 - Social accountability

ISO/TS 16949 - Automotive standard

CSR - Corporate Social Responsibility elements (Castka, Bamber, Bamber, Sharp, 2004: 216)

Other standards dedicated to particular companies, eg.

FSC - Forest Stewardship Council

CMMI - capability maturity model integration - process improvement

ISO/IEC 20000 - IT service management system

ISO/IEC 27001 - for information security management

ISO 22000 - food industry chain quality management

other. (Ruå¾eviÄ‱ius 2008: 80)

Industry practices

As examples there can be given:

Robert Bosch GmbH with implemented IMS with TS16949 standard. (Robert Bosch, 2010)

Marc Inc. Poland to have integrated ISO 9001 and ISO 14001 with HACCP system (Mars Poland, 2010)

AB "Vilniaus Pergale" with integrated ISO 22000 system

Spanish Airlines with specific aviation standards JAR 145 and JAR OPS 1

Benefits of IMS

As benefits of having IMS well introduced there can be such examples outlined:

Reduction of procedures and documentation

Stated by MTR company from Hong Kong, procedures became well illustrated, single-paged and "thereby encouraging active participation by staff".(Chan, Gaffney, Neailey, Ip, 1998: 423)

Multi-function audits

On the basis of the research on Australian SMEs – two out of three companies confirmed reduction of audits with bigger motivation of

management and employees to introduce changes in processes reexamination (Zutschi, Sohal, 2003: 221)

Improved image with customers

Spanish Airlines indicated to be the first company in aviation services to implement IMS and by that strengthen market position and having a "positive impact on bottom line". (Lopez-Fresno, 2009: 664)

Better internal communication

Spanish Airlines confirmed, that "people became increasingly aware of interrelations existing between the different standards ad processes" with simultaneously enhanced teamwork. (Lopez-Fresno, 2009: 643)

Focused management

On the basis on AB "Vilnius" company, it is noticed, that the number of unforeseen situations dropper with better external communication with suppliers and authorities, due to better supervision. (RuževiÄisius, ÄŒepulis, 2006: 72)

Reduced costs and better resource utilisation

All three interviewed Australian SMEs confirmed many benefits in better resource deployment with significant money savings. (Zutschi, Sohal, 2003: 220)

Simpler, more focused management systems in organisation

As stated by a survey on 50 British SMEs – over 80% of all companies stated this as being the most valuable to overall performance (Douglas, Glen, 2000: 688)

Apart from that, various research papers indicate more benefits, like time saving when adopting additional systems, or better scope for input by stakeholders. (Zutschi, Sohal, 2003: 216)

Disadvantages

However apart from benefits, there are some disadvantages to mention.

There are no such outlined in research papers, but can be found as an deep analysis of listed obstacles and challenges.

As the one confirmed disadvantage is IMS being expensive for middle-class SMEs. PMPoland heavy industry company, having outsourced auditors and holding valid certification influenced overall continuous improvement budget of the company, so that they decided to resign from formal certificates and implement own Knowledge Management system. (Abram, 2008: 66)

The standard may seem complicated to many, and because of that there is a lack of understanding on many levels within an organisation to have it properly implemented. Another disadvantage are the standards being not compatible enough for some specific organisations and because of that, they cannot be integrated. Many companies, especially SMEs cannot afford spending their time on learning how to introduce such system. That is why, as mentioned above, they should spend substantial amount of money on consultants, that might not be familiar with specifications of businesses or culture.

Conclusion

The research showed a worldwide implementation of IMS, its opportunities and barriers. Such system is very beneficial in overall perception and should be considered as a standard introduction of ISO norms into businesses among various industries. IMS is not only an integration of three basic quality, safety and environmental standards. As shown, there might be different standards also taken into consideration. What is however most important to remember is that having ISO well set within an organisation, is just a beginning of TQM implementation and therefore a development of all

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standards heading to continuous improvement.