

THE IMPORTANCE OF ISO 55000 IN SMALL AND MEDIUM SIZED ENTERPRISES

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All sectors are facing an increasing competitive situation, therefore economic analyzes are increasing in importance in asset management. The market dynamics tends to a continuous improvement. The objectives of profitability and life cycle costs have a significant influence on the strategy of assets and strategic decisions in the organization, so it is important to analyze capex and opex to be able to define the strategies to take. What happens when we are in a medium or small company? Generally, the answer to this is that asset management only takes place on large companies. In this research, the application of an international standard model, such as ISO 55000 in asset management, for medium and small companies, becomes relevant. This standard covers a whole concept of control, monitoring and improvement, which explains what should be done. The application of a management model based on the standard allows meeting specific requirements and characteristics. Our conclusion is that any entity, regardless of its size should establish a strategy in its asset management and ISO 55000 could help them in developing that strategy.

Keywords: ISO 55001, ISO 55002, Property asset management, Property asset manager, SMEs.

1 INTRODUCTION

The concept Asset Management, despite being relatively new, is taking an almost indispensable role in asset management, especially in the industrial sector where operating standards are dominating the entire industrial environment. The ISO 55000 standard is the best bet for those asset managers who want to guarantee the maximum reach of their objectives, as far as asset management is concerned.

Under ISO 55000, asset management is defined as the coordinated and systematic activities and practices through which an organization optimally and sustainably manages its assets and asset systems, their performance, risks, and associated costs over the long term.

We ask ourselves: “What happens when we are in medium or small companies?”, “Which are the difficulties or the possible factors that do not allow progress of SMEs?”, and “Could ISO 55000 standards help SMEs?”

The objective of this article is to analyze the importance of the application of an asset management model such as the international standard ISO 55000, in small and medium enterprises in the industrial sector, where its implementation is much lower than that of large companies.

2 STATE OF THE ART

The application of an international standard model, such as ISO 55000 in the management of assets in medium and small companies, becomes relevant. This standard covers a whole concept of control, monitoring and improvement, which explains what should be done. The application of a management model based on the standard allows meeting specific requirements and characteristics.

We analyze below:

- The current situation of SMEs, in Spain.
- The main problems of the SMEs, in Spain.
- ISO 55000

2.1 Small and Medium-Sized Enterprises (SMEs)

In general, throughout the world, SMEs are the engines of innovation, economic growth and job creation. In Spain and, very similarly in other countries, three main parameters are used to define SMEs:

- Micro companies up to 9 workers
- Small businesses up to 49 workers
- Medium-sized companies up to 249 employees

According to the Central Business Directory in Spain (IPYME 2015), as of 1st January, 2014, there were 3,144,361 companies in Spain, of which 3,110,522 (99.88%) were SMEs (between 0 and 249 employees).

Taking into account the sectoral distribution, one can observe how the size of the business varies according to the economic sectors to which the companies belong. Thus, 85.8% of industrial enterprises are micro-enterprises, 47.4% of which have between 1 and 9 employees.

After these years of economic decline, growth will be more likely to come from SMEs as they are more flexible organizations than large companies, allowing them to respond quickly to market indications.

The greater the number of SMEs in a particular nation, the more important is the role of SMEs in achieving sustainability. Despite their great importance and contribution to the economy, SMEs are overwhelmed by high failure rates and poor performance levels. SMEs have the fundamental interest of survival. In Spain, the business survival rate is less than 80% after one year.

2.2 Main Problems of SMEs

In order to understand the problems faced by SMEs in Spain, we have studied the different publications of the *General Sub-Directorate for Support to SMEs* (IPYME 2016) and the article *Spanish SMEs and the Challenge of Growth* (El Confidencial 2015). After this study, we have divided the problems of the SME into three main sections: financial and fiscal, socioeconomic, and technological problems. Below we disaggregate each one of the previous sections, with the aspects that we consider most relevant:

Financial and Fiscal problems:

- Lack of liquidity, with difficult access to bank loans or other types of financing. In addition to loans having very high interest if we compare Spain with the rest of the European countries.
- High tax charges and lack of use of tax benefits due to lack of knowledge of their existence.
- Low profits, implying little capacity for expansion and permanence.
- Ignorance of their costs, because evaluation techniques cannot be implemented with high financial costs and if they are known, they cannot be solved because of lack of liquidity.
- Lack of administrative controls in their companies and lack of optimization of resources.

Socioeconomic problems:

- Poor negotiation capacity with suppliers and customers.
- Lack of knowledge of the market and its competitors and low competitiveness.
- Lack of preparation and business management, especially focused on a global world, with an open economy.
- They lack a culture of association, either between producers, entrepreneurs and traders, and service providers, or between any of them. Generally, it operates individually and does not share risks or opportunities
- Lack of training of labor, both in the administration of the companies and the rest of staff, and inability to retain talent.

Technological problems:

- Little investment in R & D & I and in digital transformation.
- Low levels of productivity and inadequate quality controls, due to lack of technology.
- Lack of modernization in their production schemes.
- The export potential of the companies is untapped.

2.3 ISO 55000: 2014

The Institute for Asset Management (IAM 2008) and the British Standards Institution (BSI 2008) launched a project on a standard for physical asset management known as BSI PASS 55. The BSI PAS 55 is the common framework for good asset practice, particularly in the engineering and utilities sectors. In 2010, the ISO technical committee decides to create an international standard for asset management based on PAS 55 document. AENOR, in collaboration with other accreditation and standardization bodies, develops ISO 55000 on Asset Management.

The ISO 55000 aims to provide a standardized framework for a management system for asset management (ISO 55000 2014, ISO 55001 2014, ISO 55002 2014). These rules can be applied to any organization, as long as the assets are a key factor in achieving the business objectives. ISO 55000 is the first standard that broadly covers the elements that must be applied for the management of any asset. The rule is essential for organizations where assets are vital.

ISO 55000 does not define "how", as it depends on the context of the organization and the assets to be managed. Companies that implement ISO 55000 will be better positioned to react proactively to markets, regulations, shareholders, etc. The requirements of the asset management system in ISO 55000 are:

- **Context of the organization:** The organization must define drivers and external and internal constraints relevant to its purpose and ability to achieve the results of its Asset Management system: regulations, financial, organizational culture, and organizational values. Stakeholder influence is key to setting standards for decision-making and contributing to the goal setting of the organization.
- **Leadership:** Leadership and a culture of constructive work contribute to add value. To do this, it is necessary for the organization to adapt their leadership, with the commitment of all levels of management, to successfully establish, operate and improve asset management within the organization. This can be done when the different responsibilities and their corresponding authorities are defined. In addition, employees must be informed and trained. Finally, all interested parties should be consulted. Top management and the organization must share a common goal.
- **Planning:** Planning is a key element of the Asset Management system. Management determines the risks and opportunities to ensure the asset management system, prevent or define unwanted effects and achieve continuous improvements of the organization. Goals require plans to achieve them; these plans should include various activities, resources, and funding. The organization must have the asset management plan, which ensures risk management and goal measurements. These integrated plans should define when, who and how it will be done, and then proceed with the evaluation.
- **Support:** Cooperation with different functional areas will be required, so resources will have to be shared. Information systems must be available to support the process. The documented information should be, controlled, communicated and auditable. The system should specify the competency requirements for personnel involved in asset management.
- **Operation:** It enables guidance and control of asset management activities. The projects and procedures, for the implementation of the Plans, should provide with feedback the design and operation of the asset management system, including those that have outsourced activities. All of these involves change management activities.
- **Performance evaluations:** The performance and effectiveness of the asset management system must be monitored, measured, analyzed, evaluated and audited. Top management should review the asset management system for the convenience, adequacy and effectiveness of the system. The performance results of the management activities should be kept as documented information. The performance assessments, combined with the estimation of the consequences of failures, gives an understanding of the risks. ISO 55000 requires specifically for the efficient management of data and the transformation of data into information to measure the performance of assets.
- **Improvements:** The concept of continuous improvement is applicable to everything: the assets, the activities, the system, the processes, etc. Opportunities for improvement arise through monitoring the performance of the system and the asset. Potential nonconformities or nonconformities can be identified in a variety of ways, including: management reviews or audits. Nonconformities require corrective actions and potential

preventive actions. Incidents must be accompanied by an emergency response plan and business continuity plan.

3 PROPOSAL FOR ACTIONS

Having studied the characteristics that prevail in our economic environment and knowing the current condition of small and medium enterprises, our recommendation is that companies must have a comprehensive service strategy that helps improve overall efficiency, performance, and maintenance functions of an organization. For this, SMEs could implement ISO 55000 in their basic asset to reduce costs, considering that all the physical assets of an organization are not the same in order to obtain a higher added value, some are more critical to achieve the purpose of the company than others.

ISO 55000 requires everything to be documented: processes, procedures, reports, measurements, etc., that is, anything that provides evidence of compliance. It is necessary to collaborate with the other functional areas of the organization, especially: finance, human resources, information management and senior management. It will probably be necessary to improve the training and the learning of the staff, to guide the practice and introducing the following concepts slowly: risk management, operations management, etc. Thanks to the implementation of ISO 55000 the risks can be reduced, and performance and competitive advantage can be increased, which will help improve the company's image.

We also propose that the asset management strategy focus on the physical assets of the industrial sector with the application of ISO 55000 in small and medium-sized enterprises.

In order to achieve the product's quality objectives, manufacturers must also make continuous efforts to improve the product and the quality of the process. They must also aim to ensure that the equipment necessary for the create the products, functions at full performance. Reliability and productivity of assets are essential to the financial success of the organization.

As we have seen, manufacturing equipment is one of the main concerns of organizations: breakdown of manufacturing equipment. Defects in repair can affect to the quality, the cost and the delivery time of the product. Therefore, we suggest that this activity is important for the overall performance and optimization of the asset life cycle.

In general, the challenge for organizations is the need to maintain and increase capacity, efficiency, revenue, customer satisfaction and, if possible, reduce capital, operating and support costs.

Many SMEs are not aware of how to improve maintenance processes. ISO 55001 requires the organization to establish a Life Cycle Management Plan that includes the associated risk for a specific asset and the consequences of this risk.

ISO 55000 proposes that Asset Management ensures that the assets meet their purpose. Organizations must develop and implement processes that connect the performance and purpose of the assets with the objectives of the organization. The implementation of this process should ensure the capability of the entire asset life cycle, conduct monitoring and continuous improvement as well as provide the necessary resources and trained staff to demonstrate the assurance of asset management activities for startups.

4 CONCLUSIONS

The possible factors that do not allow the advance are, among others: the economic factors, the vision of the personnel, the attitude, the subjects of human development, the technology, the capacity of production, etc. All these weaknesses, mentioned above, contribute to the mortality

of SMEs. ISO 55000 already contemplates all these activities in its asset management system and therefore can be determined as a correct guide to perform an appropriate asset management.

The use of ISO 55000 in SMEs will give added value that can guarantee the sustainability of the business, since as the size of the business increases, it becomes more difficult for the organization to carry out the control and supervision functions.

The implementation of ISO 55000 also offers an opportunity to re-examine and refine a multitude of activities: relationships with suppliers, regulatory frameworks, insurance, customer relations and stakeholders. Global practices have demonstrated that asset management can improve the economic efficiency of an organization.

Our conclusion is that any entity, regardless of its size should establish a strategy in its asset management and ISO 55000 could help in the development of this strategy since SMEs need to establish asset management strategies to generate value to the optimizing material, human and financial resources.

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