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ASSET MANAGEMENT EVOLUTION AND MAIN DEVELOPMENTS

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ABSTRACT

Throughout last decades, the Asset Management has been acquiring relevance in the Architecture, Engineering, Construction and Operation (AECO) sector, recognizing its importance for increasing competitiveness. This issue of asset is in constantly evolution along with widespread adoption of information systems and technologies. This paper presents a framework of Asset Management, highlights its origin and evolution over the last decades, including the scientific developments as well as applicable specifications and standards.

Keywords: asset management evolution, PAS 55, ISO 55000 series, AECO sector.

INTRODUCTION

For several decades, the importance of Asset Management has been under discussion and development, taking into account the buildings life-cycle concept. Asset Management is not a recent discipline. Although this evolution is only thought as a change in semantics, it is more certain that its functions and responsibilities evolve alongside changes in nomenclature (IBM, 2007). In an organization, Asset Management integrates several areas such as: i) engineering; ii) financial management; iii) risk management; iv) logistics and support; v) relationship with customers; vi) environmental management and legislation; and vii) asset life-cycle requirements (design, construction, operation, maintenance and end-of-life).

Asset Management is a terminology that has been increasingly used in organizations, and can present different meanings, depending on the country or sector where it is used (Davies et al., 2008). There are several research studies that demonstrate the importance of asset management in various sectors, levels or applications (El-Akruti et al., 2010; Henderson et al., 2014; Abdelhamid et al., 2015). However it is verified that is more used in the financial area, with more emphasis on the management of actions. Although less used in the area of engineering and maintenance, the Asset Management have, over time, acquired growing importance in organizations.

In 2004 the Institute of Asset Management (IAM), in partnership with the British Standard Institute (BSI), developed PAS 55 specification, which defines Asset Management as the systematic and coordinated activities and practices that an organization uses to manage its assets and systems in an optimal and sustainable way.

More recently, in 2014, the international series of standard ISO 55000, defines the requirements for an appropriate Asset Management system throughout the asset life cycle. It considers that the value realizations require a balance between cost, risk and benefits of the asset over different time periods.

RESULTS AND CONCLUSIONS

Asset Management corresponds to the natural evolution of the operation and monitoring of the organizations assets in order to optimizing them. It also achieves the evolution of the AECO sector requirements and the increase need for reliability and the assurance of quality in the products supply and services. Figure 1 shows the evolution of Asset Management in last decades, in accordance with the corporate thinking evolution.

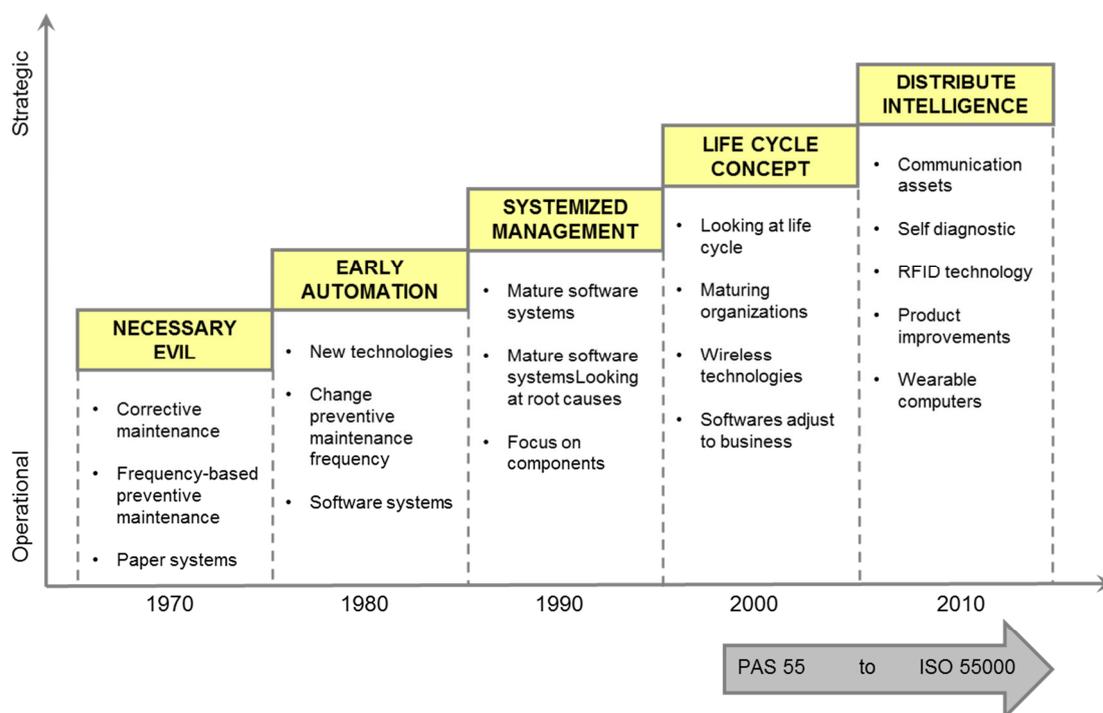


Fig. 1 - Asset management evolution

The need for optimization, in the management of the assets, is visible in the progressive increase of the regulatory entities requirements in different service areas.

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