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### Management Systems Integration: A *Renaissance* organizational Era

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#### KEYWORDS

Integrated Management Systems, Maturity, Survey.

#### ABSTRACT

Holistic approach to management, fulfilling all the stakeholders' requirements, characterizes management systems (MS) integration. Other distinctive features are the interactions enhancement between several sub-systems and the hiper-technological context where it develops. All these characteristics mimic a sociological, cultural, political, artistic and intellectual era: *Renaissance*. Taking into account the polymath or *Renaissance man* concept we may converge through the analogy: science and art harmoniously integrated in the same entity focused on the achievement of several objectives at the same time. An organizational *Renaissance* era, enabling a *Middle Age* to a *Modern Age* organizational evolution may be forecasted providing a successful management sub-systems integration. Taking into account this assumption, some lingering questions raised among MS community: Which is the best strategy to management systems integration? How to comparatively assess an integrated management system (IMS)? Which are the most efficient IMS? How many evolutionary (maturity) levels should be considered? Should a polymath profile be required for employees in this newly organizational context? It is intended that the present extended abstract be the first on reporting some preliminary results of an ongoing project aiming the maturity and efficiency levels assessment of IMS.

#### INTRODUCTION

Maturity assessment of products or systems had been described in several papers being, currently, a widespread implemented methodology to check for an evolutionary state of the focus item (Khoshgoftar and Osman, 2009, Domingues *et al.*, 2011). With its genesis in the Quality systems background, basic features from reported maturity models are their relative (comparative) and empirical nature. Maturity models demonstrated its usefulness in software, projects and generic systems being the last ISO 9004 revision

proposal based on a maturity assessment scheme. Usually consisting on 4 to 6 levels, the most critical task on model development is the key-process areas definition from each level, that is, a systematic evaluation on the characteristics that distinguishes each evolutionary state of the focus item related to an ultimate excellence level. Due to their empirical nature, key-process areas definition and relative maturity level location should rely on data collected from the studied focus system, being surveys, questionnaires and interviews common and widespread research tools. Published IMS research/conceptual studies increased due, mainly to the fact that organizations are carrying out IMS implementation on their own. From characterization (Santos *et al.*, 2011) to conceptual studies (Domingues *et al.*, 2011), sub systems standards compatibility (Simon *et al.*, 2011), or empirical item specific focused papers (Zeng *et al.*, 2011), several authors addressed recently the integration subject.

#### METHODOLOGY

An online survey with thirty questions was held focusing organizations with more than one certified management sub-system according to the following standards: ISO 9001, ISO 14001 and OHSAS 18001/NP 4397. The results reported in the present paper were supported on twenty six validate answers given by MS managers to the survey.

#### RESULTS

Figures 1 and 2 describe the geo-dimensional profile from the surveyed organizations, namely their geographical location and number of employees. According to Figure 1, we may conclude that the sampled organizations matched the Portuguese organizations distribution. Data on Portuguese organizations dimension will be, later, compared with data collected in the survey in order to evaluate the sampled organizations regarding the number of employees. At this moment, that comparison is not possible, but results available are reported in Figure 2.



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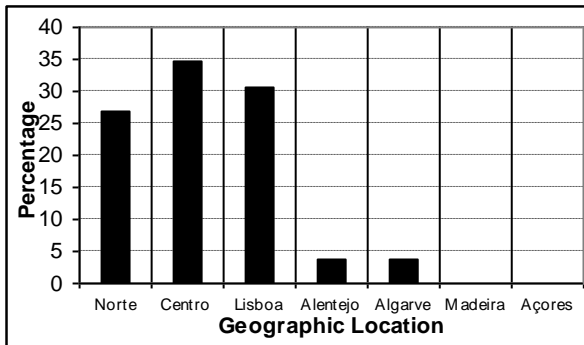


Figure 1: Location per NUT II Region

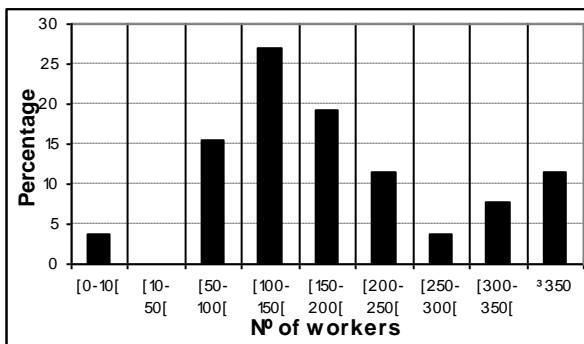


Figure 2: Organizations dimension (nº of workers)

Figure 3 shows the IMS typology from the organizations that answered the survey.

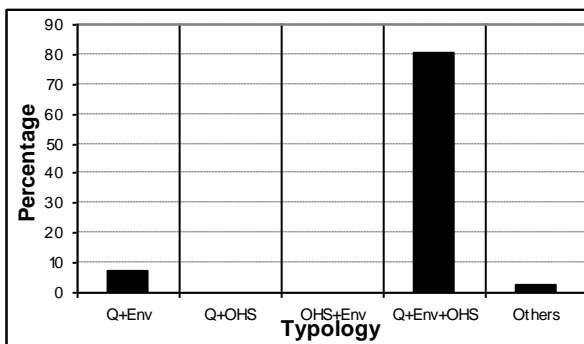


Figure 3: IMS Typology

Results reported on Figure 3 suggest that organizations option relies mainly on a full-scale integration perception regarding Quality, Environment and Occupational Health and Safety. As been stated earlier, answers providing non-consensual information are of utmost importance allowing to assess differences between implemented IMS. Figure 4 shows the results

regarding the identification in the organization of items not susceptible of integration.

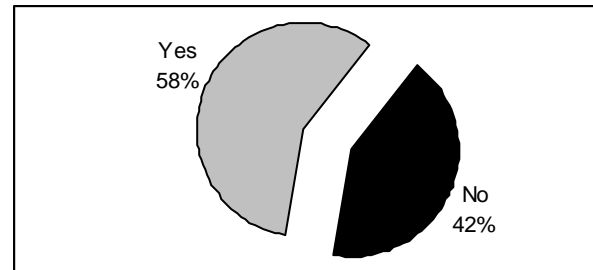


Figure 4: Identification of organizational items not susceptible of being integrated

### FINAL REMARKS

IMS related reported studies are widespread in bibliographic databases. Comparison and comparative rating between implemented IMS is not currently possible due to the inexistence of a solid standard. Hence, maturity assessment and the development of a related tool is a goal envisaged by MS community. The current paper reported the preliminary results of an ongoing project aiming to develop such tool.

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