

THE STRATEGY IMPLEMENTATION AND CERTIFICATION OF MANAGEMENT SYSTEMS OF RESEARCH, DEVELOPMENT AND INNOVATION (NP 4457) IN PORTUGUESE FIRMS

Vitor Braga
 Porto Polytechnic, CIICESI, CETRAD, Portugal
 vbraga@estgf.ipp.pt

Sérgio Gomes
 Porto Polytechnic, CIICESI, Portugal
 sdg@estgf.ipp.pt

Alexandra Braga
 Porto Polytechnic, CIICESI, CETRAD, Portugal
 abraga@estgf.ipp.pt

Abstract:

Innovation, through Research & Development (R&D), is critical to firms' competitiveness as they, usually, are responsible for the business differentiation and thus, remain in the market. However, the process of Innovation, and in particular Research, Development, and Innovation (RDI) are, as many others, processes within the business. To such an extent, the RD&I is one of the functions of corporate management and, thus, need to be monitored, assessed and evaluated.

The implementation and certification of Quality Management Systems follow both international and national norms, in order to allow firms to gain the certification. There is a Portuguese Norm for the Implementation and certification of RD&I Management Systems (NP 4457) that establishes the processes and norms that may lead to such certification.

There is a very limited literature on the implementation and certification but, particularly, the literature aimed to explore the RD&I Management Systems in Portugal is almost nonexistent. This remains as one of the most important contributions of this paper, which aims to analyse the innovation activities in the Portuguese firms with processes of implementation and certification of RD&I Management Systems, taking into account the organisation's motivations, advantages and barriers to this process.

The primary data collected from companies listed in the database of IPAC, through an online questionnaire, was subjected to techniques of multivariate analysis in order to group factors associated to the process of implementation and certification of RD&I Management Systems.

The results show that the differentiation is the main motivation to implement a RD&I management system. We, further, show that, often, companies collaborate with universities and/ or research centers that can help develop their knowledge. This study results on the extraction of three factors that describe the process of implementation and two factors in what regards the involvement of the organisation in the process.

Keywords: *RD&I, implementation and certification of management systems, innovation, strategic implementation, Portugal, quality management*