Identification and Analysis of Project Management Success Factors in Information Technology SMEs

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ABSTRACT

This article identifies and analyses the success factors involved in project management through an exploratory study that encompasses nineteen interviews, fifty-seven surveys and one session with a focus group of project managers, department managers who have taken the role of project managers and general managers of small and medium-sized enterprises (SMEs) of the information technology (IT) sector in Bogota, Colombia. After analyzing the information, the authors identified eleven factors for the achievement of project management goals in these organizations. These comprise managerial, organizational and sector aspects that influence the resource management and leadership in projects of SMEs of information technology.

KEYWORDS

Information Technology, IT, Project Management Success, Project Management, Project Success, Small and Medium Size Enterprises, SMEs, Success Factors

INTRODUCTION

SMEs tend to contribute significantly to countries’ economies and, as such, are of interest for governments (Espinosa, Molina y Vera, 2015). In 2008 in Colombia 86.7% of the registered companies were SMEs (National Statistics Administration Department, 2009), of which 29% were located in Bogota. Despite Bogota’s importance to the national market, between 2009 and 2013 32.5% of SMEs failed (Espinosa, Molina ad Vera 2015).

The main source of income of SMEs comes from their value chain activities. For this reason it is fundamental for these companies to be competitive and productive and become successful in their businesses (Labrada and Sierra 2013). Applying project management practices for SMEs contributes to the achievement of their organizational goals and increases their productivity even more than applying marketing or business management practices (Pollack and Adler, 2014). However, in general, project management is still in a rudimentary stage in SMEs (Kostalove and Tetrevo, 2014).

According to Labrada and Sierra (2013) organizations with less project management capacity generally exceed their assigned budget and do not comply with the deliverables of the product or services. In Bogota, 13.6% of medium-sized businesses and 8.6% of small business have a standardized process for project management (Labrada y Sierra 2013).

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This article addresses a number of research questions regarding project management of IT in SMEs in Bogota with the purpose of reducing scope deviations, time, and costs of IT projects as well as increasing their productivity, competitiveness, sustainability and contribution to economic growth as a source of employment and innovation in the country. These questions are: What are the success factors of IT project management? What are the common and distinctive aspects among the identified factors? Do the identified factors correspond to the realities of these businesses? And, which are the most influential factors?

This research contributes to the identification and analysis of critical success factors in project management in IT sector SMEs. Particularly, and because of sector and SMEs importance in the economy of any country, it is very important to identify critical factors, so that companies can have a better focus of efforts, efficiently use scarce resources and increase organization effectiveness, achieving the strategic objectives. The results of this article allow a better organization and administration of projects in small-and-medium enterprises, where, typically, it is difficult to meet all the operations needs and at the same time carry out projects to be competitive.

BACKGROUND

In 2013, the IT sector had a share of 0.54% in Colombia’s GDP. In 2012 their gross production was $4.4 billion and between 2006 and 2012 the sector grew by 15.8%. The main services of the IT sector are activities related to software (61%), technology platforms (23%) and data management (13%) (Bancoldex 2014).

According to Law 905/2004, one can define an SME by the number of workers and their total assets. A small business has to have between eleven and fifty workers and its assets must be in the range of five hundred and one and five thousand legal minimum monthly salaries (LMMS). A medium-sized business has to have between fifty-one and two hundred workers and have assets in between five thousand and one and thirty thousand LMMS.

SMEs are companies characterized by having a particular culture, interests and an entrepreneurial spirit. Their main feature is their capacity of developing individualized products and of rapidly changing their structure when market conditions require it. However, they have difficulties in obtaining funds, having specialized and qualified manpower capacity and entering the international market (Espóna, 2013; Spanish Innovation Magazine, 2005). Additionally, software development SMEs only have a small number of employees, a small budget for research and development, short-term benefits and limited change management (Spanish Innovation Magazine, 2005).

In order to understand the factors of success of SMEs in Colombia there are three relevant aspects to bear in mind: strategic planning, which has been found to be characterized by informal processes based on intuitive and emotional decisions determined by an entrepreneur’s personality (Castaño, 2011); competitiveness, which in SMEs improves as a result of having a strategic planning process (Mora, Vera and Melgarejo, 2015) and organization, which suffers from a lack of governability and engineers in senior positions who disregard the importance of administrative processes and strategic direction (Franco and Urbano, 2015; Martín, Aramburo y Velásques, 2015).

Success Factors in Project Management

A number of authors have studied the skills needed to be successful in project management (Bride and Robinson, 2005; Shenhar et al., 2001). However, the factors associated with the success of project management are subjective and complex as these factors are subject to different stakeholders’ perception and may change depending on the project. Furthermore, there is no consensus as to what these factors are (Montequin et al., 2014). The factors of success are contextual elements of the project or management processes that have to be influenced or controlled (Dixon, 2012). De Baker et al., (2010) sustain that the critical factors of success are elements which seek to positively influence the probability of success of the project or its management.
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