

PUERTO RICAN INFORMATION TECHNOLOGY FIRMS' RADIOGRAPHY: EMPIRICAL EVIDENCE

Rosarito Sánchez-Morcilio, University of Puerto Rico Río Piedras Campus

Justin Paul, University of Puerto Rico Río Piedras Campus

Abstract

The Global Competitiveness Report Index 2013-2014 ranked Puerto Rico as 30th among 148 countries around the world. The information technology sector of the economy is among the fastest growing industry in the world (Paul & Gupta, 2013). It is important to observe the characteristics of information technology firms founded in Puerto Rico due to its great economical potential for the Caribbean region. In addition, the more information the academia has about those firms, the better educational partnerships can be created. Since few data about the information technology firms from Puerto Rico was found, a search for the characteristics of those firms was embarked. This study is radiography of the Puerto Rican Information Technology firms.

The objective of this study is to find out the characteristics that describe the Puerto Rican Information Technology firms.

This is a quantitative study conducted in 2013. A 25 items online questionnaire was administered to 55 information technology firms. According to the Puerto Rico Information Technology Cluster (2013), it has 70 members, which are Puerto Rican information technology firms. The data analysis was done with a 95% confidence level and 5 as confidence interval.

All 55 participating firms were founded in Puerto Rico from 1968 to 2013. The average year of foundation is 2000 with a standard deviation of 9 years. Most firm main area of service is pharmaceutical, biotechnology, project management, cloud computing services, hardware installation and maintenance, enterprise systems, and information technology auditing. Most firms (35%) have from 26 to 100 customers. More than half percent of firms (55%) have from one to 10 employees. Eighty-four percent of firms serve the private sector. More than half firms (55%) report to have its total annual revenues from fifty thousand US dollars but less than or equal to one million US dollars. Almost half firms (45%) report its total annual revenues to be more than one million US dollars.

Even though more than half firms (55%) have operations only in Puerto Rico, the null hypothesis is rejected because there are closed to half firms (45%) operating not only in Puerto Rico, but also in United States, the Caribbean, and other countries

from continents like Central America, South America, and Europe. Most firms, which serve the Caribbean, operate in Dominican Republic, a close to Puerto Rico country.

Puerto Rican Information Technology firms while having a low number of employees serve close to a hundred customers in the areas of pharmaceutical, biotechnology, project management, cloud computing, and other related information technology areas. Most firms serve the private sector of the economy. Close to half of firms give services in United States, the Caribbean, and other countries.

More studies can be performed to determine whether the Puerto Rican Information Technology firms comply with the Uppsala internationalization process (Johanson & Vahlne, 2009) or with the born-global firm theory (Knight & Cavusgil, 2004).

Furthermore, studies about Information Technology firms from Puerto Rico are recommended so academia can improve serving those firms sustain innovation.

Keywords

Information technology firms, information technology sector, Caribbean region