

Development of technological capability by Cuban hospitality organizations

Uma Kumar*, Vinod Kumar, Danuta de Grosbois

Eric Sprott School of Business, Carleton University, 1125 Colonel By Drive, Ottawa, Ontario, Canada K1S 5B6

Abstract

This study investigates the key elements that affect the ability of hospitality organizations to cultivate technological capability through innovation. The focus of analysis is not on the institutional context, but on the hotel and tourist companies. A theoretical framework that links the type of innovation undertaken by the firm, the firm's managerial capabilities, learning culture, organizational structure, systems and procedures, technological absorptive capacity and level of government support with the level of technological capability is presented and tested empirically based on the data on innovation projects from 62 Cuban hospitality companies. Analysis of the data confirmed hypotheses that group management skills, project management skills, learning culture, and government support are significantly related to the development of technological capability in these companies.

© 2007 Elsevier Ltd. All rights reserved.

Keywords: Technological capability; Innovation; Tourism; Cuba

1. Introduction

Innovation and technological capability of a firm are widely recognized as critical factors contributing to the firm's performance, competitive advantage and sustained commercial success in the market and, therefore, they have been extensively investigated from different perspectives for a long time now. However, the vast majority of innovation studies focus solely on technological innovation in the context of manufacturing industries, despite the fact that the impact of innovation and technology on firm performance is expected to rapidly increase in all service industries, and in hospitality industry in particular (Sirilli and Evangelista, 1998).

The growing importance of innovation in hospitality industry mainly stems from the recent growth of demand and competitiveness in this sector, and from the rapid advances in the technologies available for hospitality organizations. Survival and success of hospitality companies highly depends on their ability to quickly provide the required amount of services and products that can satisfy

customers' changing needs in an effective way, to adequately react to competitors' innovations, to take advantage of the new technological developments available in the marketplace, and to guarantee high quality and safety. As a result, in order to be competitive and meet these requirements, companies operating in the hospitality sector need to become more innovative and increase their technological capabilities (Hjalager, 2002; Rodriguez and Burguet, 2003).

Development of the technological base in hospitality organizations is especially critical for some of the developing countries, including China, Mexico, and the countries of the Caribbean region. These countries have recently become very popular tourist destinations and are extremely dependent on the hospitality industry, since it is often the only sector of their economies which is not experiencing stagnation. This trend is especially visible in the countries of the Caribbean region, which have a higher proportion of total employment and gross domestic product derived from hospitality than any other region in the world (Clancy, 2002; CTO, 2004; Harrison et al., 2003). This high dependency on tourism sector makes it critical for these countries to foster development of their tourism base through innovation and building of technological capabilities.

*Corresponding author. Tel.: +1 613 520 6601; fax: +1 613 520 4427.
E-mail address: uma_kumar@carleton.ca (U. Kumar).

Although there are a number of recent studies investigating innovation in the hospitality industry (e.g., [Faché, 2000](#); [Hallenga-Brink and Brezet, 2005](#); [Hjalager, 2002, 2005](#); [Mattsson et al., 2005](#)), the existing literature is still in a relatively early development phase and does not address the issue of technological capability development through innovation, despite its importance and need for a better understanding of this process in hospitality context. The objective of this paper is, therefore, to provide a framework explaining how hospitality companies can build their technological capabilities and identifying factors that influence the effectiveness of this process.

The proposed framework is tested in the context of the Cuban hospitality sector. Although it can be argued that the traditional concepts of competitive advantage or commercial success are different in the context of a communist country such as Cuba, none-the-less there are several reasons why it is believed that Cuba offers appropriate setting for the testing of the conceptual model proposed in this study. First of all, although there is no competition internally in Cuba in the same sense as it is in Western countries, the Cuban hospitality industry has to compete with other destinations in Caribbean and in the world to attract international tourists. Therefore, especially the hospitality sector in Cuba is forced to recognize and follow certain market rules if it wants to successfully compete for international tourists. It means that despite the political and economic systems in Cuba, the Cuban hospitality industry faces the same need to be able to provide high quality services and products that will satisfy the customers, to be competitive and to take advantage of new technological developments available for hospitality organizations.

Cuba offers a good setting for investigation of innovation and technological capability in hospitality sector also because Cuban government is strongly promoting and facilitating investment in innovation in hospitality sector. Innovation is an important part of Cuba's general policy to develop tourism and hospitality industry ([Klinghoffer, 1998](#)). In order to support and enhance the organization and management of scientific and innovative activity in Cuban hospitality industry and to promote development of innovative enterprises, the government agencies support and facilitate designing and developing more efficient marketing of the hospitality services and products, increasing and diversifying hospitality products and making them more competitive, remodeling and increasing room capacity, increasing the hospitality system's economic efficiency, implementing computer and communications systems, and incorporating more foreign capital into the sector. As a result, Cuban hospitality organizations are investing significantly in innovations, due to both the government policy fostering innovation, and because of strong competition from other Caribbean destination ([Cerviño and Cubillo, 2005](#); [De Holan and Phillips, 1997](#); [Yaw, 2005](#)). Given these characteristics of Cuba, it is strongly believed that the hospitality industry in this

country is an example of an industry that is strongly motivated to innovate because of the competition it faces and, therefore, represents valid settings for testing of the proposed model. The applicability of all the variables to the Cuban context will be discussed in the following section, in order to enable proper interpretation of the results.

2. Technological capability and innovation in hospitality

Commonly defined as the firm's ability to make effective use of technological knowledge, technological capability is the primary attribute of human and institutional capital and inheres not in the knowledge that is possessed but in the use of that knowledge and in the proficiency of its use in production, investment, and innovation ([Westphal et al., 1985](#)). Technological capability encompasses the firm's ability to identify its technological needs and to select the technology to fulfill the needs; operate, maintain, modify and improve the selected technology; and promote technical learning ([Kumar et al., 1999](#)). It can therefore be viewed as both the process of accumulating technical knowledge and the process of ongoing organizational learning ([Kumar et al., 1999](#); [Leonard-Barton, 1995](#); [Rosenberg and Firschtak, 1985](#)).

Conceptualizations and typologies of technological capability existing in the literature are mostly developed from the manufacturing perspective ([Kumar et al., 1999](#); [Lall, 1982](#); [Madanmohan et al., 2004](#); [Westphal et al., 1985](#)). In order to investigate technological capability in the hospitality context, this paper builds on classification proposed by [Kumar et al. \(1999\)](#) and distinguishes among investment capabilities, operational capabilities and dynamic learning capabilities. Investment capabilities are defined as the skills and information needed to identify feasible investment projects, locate and purchase suitable technologies, and select the technologies. Operational capability generally consists of the skills and information needed to operate, maintain, repair and adapt the technology for increased production and efficiency, i.e., the know-how. Finally, dynamic learning capability consists of the skills and information needed to generate dynamic technical and organizational changes and to manage these changes. Dynamic capability enables the users of technology to replicate and alter the technical system and to create new products, new processes, new design, and even new technologies, i.e., to be innovative ([Kumar et al., 1999](#)).

The major mechanisms of building technological capability of a firm is innovation. In general, innovation is defined as the adoption of an idea or behavior that is new to the adopting organization ([Rogers, 2003](#)). The innovation can be a new product, a new service, a new technology, a new way of doing things, or a new market. Consequently, innovation is related to change, which can be either radical or incremental ([Harkema, 2003](#)). By improving technological capabilities of a firm, innovation provides the firm not

Download English Version:

<https://daneshyari.com/en/article/1010202>

Download Persian Version:

<https://daneshyari.com/article/1010202>

[Daneshyari.com](https://daneshyari.com)