Innovation, entrepreneurship, and restaurant performance: A higher-order structural model

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Highlights
- Examines innovation, ESE and human capital as predictors of restaurant performance.
- Implementing innovation increases restaurant performance.
- ESE of the restaurant owner contributes to enhanced restaurant performance.
- Human capital indirectly affects performance through innovation and ESE.

Abstract
Drawing on theories from hospitality, innovation, and entrepreneurship, this study examines a higher-order structural model investigating business innovation, the owners’ entrepreneurial self-efficacy (ESE), and human capital as drivers of restaurant performance. The theoretically derived model was tested on data from 198 café and restaurant owners in Australia. The PLS-SEM analysis found restaurant innovation activities and the owner’s ESE to positively influence restaurant performance. Furthermore, the six ESE dimensions had varying effects on restaurant performance, with ‘Developing new products and market opportunities’ having the strongest effect. In contrast, the entrepreneur’s ‘human capital’, representing their levels of business ownership experience and entrepreneurship/industry education, did not significantly affect restaurant performance. However, human capital indirectly affected performance through innovation and ESE. The findings of this study advance theories in restaurant entrepreneurship and performance and present important implications for industry authorities to develop a successful and sustainable restaurant sector.

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1. Introduction

Australia’s restaurant sector employs the largest share of the workforce in the tourism industry while contributing $22.1 billion in earnings to the national economy (Restaurant & Catering Australia, 2014; Tourism Research Australia, 2011). The recent ‘Restaurant Australia’ marketing campaign launched by Tourism Australia, the Government agency responsible for attracting international visitors (Tourism Australia, 2014) is indicative of the critical role played by the restaurant sector for Australian tourism. The ‘Restaurant Australia’ campaign aims to brand Australia as the world’s greatest restaurant, promoting the unique food and wine experiences being offered. However, the restaurant sector faces many challenges, with businesses struggling to succeed in the midst of high competition, low barriers to entry, price conscious consumers, rising food prices, government regulation, and high labour costs (Assaf, Deery, & Jago, 2011; Restaurant & Catering Australia, 2014). The sector is also dominated by small and medium enterprises (SMEs) with over 99% of restaurant businesses classified as SMEs (ABS, 2014). A recent study by Restaurant & Catering Australia (2013), the main industry association group, reported that 63% of restaurant businesses earn an average net profit of just 2% after taxes. As a result, survival rates in the industry are low, with only half of the businesses that were operating in 2009 still trading in 2013 (ABS, 2014). Thus, understanding restaurant
performance is the central focus of this study as these businesses are critical for the success of the tourism and hospitality industry, and for the livelihood of the regions dependent on tourism income to survive.

Evidence suggests that restaurants can improve quality and reputation, cut costs, and increase sales and profits through ‘innovation’ (Ottenbacher & Gnoth, 2005). A continuous innovation process helps restaurants heighten barriers to imitation, keeping their portfolio ahead of the competition which establishes a long-term competitive advantage (Ottenbacher & Harrington, 2007). However, there is a significant gap in our understanding of how innovation affects performance in small and mid-sized restaurants (Ottenbacher & Gnoth, 2005). Studies of restaurant innovation practices are limited to a descriptive overview of the new product development process of fine-dining and quick-service restaurants (Ottenbacher & Harrington, 2007, 2009a, 2009b; Stierand, Dörfler, & Macbryde, 2014). Studies are yet to examine a broader range of innovations in the context of restaurant businesses — these include innovation in services, processes, management structures, and marketing techniques (Hjalager, 2010). Small independent restaurants may not have access to resources such as high quality produce and highly trained professional chefs (Ottenbacher & Harrington, 2009a), or have formal, well-structured innovation processes (Ottenbacher & Harrington, 2009b). Therefore, they may innovate differently by adopting and adapting innovations from outside sources instead of primarily creating new food products in-house. To explore this, a more rigorous examination of innovation as a driver of restaurant performance will be conducted in this study by conceptualising innovation to include product, service, process, management, and marketing innovations.

Innovation is also a key component of entrepreneurship, which is relevant when studying small independent restaurants as the owners of these businesses are also considered entrepreneurs (Jogaratnam, Tse, & Olsen, 1999). The Entrepreneurship Theory of Innovation identifies entrepreneurs as a key driver of economic development through the introduction of innovation (Schumpeter, 1952). Thus, entrepreneurs develop new innovations by introducing new products or production methods, opening up new markets or sources of new materials, and creating new organisational structures in industry. In doing so, they break the status quo, create change in the market, and develop a competitive advantage (Hebert & Link, 2006).

Studies of entrepreneurship in tourism and hospitality have focused on entrepreneurial self-efficacy (ESE) (Hallak, Assaker, & Lee, 2015; Hallak, Assaker, & O’Connor, 2012; Hallak, Brown, & Lindsay, 2012; Hallak, Lindsay, & Brown, 2011). ESE refers to an individual’s belief in their ability to successfully achieve the tasks of entrepreneurship (Chen, Greene, & Crick, 1998). These tasks include developing new product and market opportunities, building an innovative environment, initiating investor relationships, defining core purpose, coping with unexpected challenges, and developing critical human resources (De Noble, Jung, & Ehrlich, 1999). Tourism entrepreneurs with high ESE have belief in their entrepreneurial capabilities, minimising their self-doubt which enables them to pursue entrepreneurial opportunities, be more persistent in overcoming failure, and be more confident to face challenges (Chen et al., 1998; Hallak et al., 2011). Thus, following the Entrepreneurship Theory of Innovation (Schumpeter, 1952), the restaurant owners’ entrepreneurial capabilities are also critical for the development and implementation of business innovations.

Entrepreneurship theories also demonstrate the role of ‘human capital’ in influencing innovation, ESE, and performance (Davidsson & Honig, 2003; Maritz & Brown, 2013). Human capital refers to the amount of knowledge, skills, and abilities an individual possesses from their formal education, training, and work related experiences (Saffu, Apori, Elijah-Mensah, & Ahumatah, 2008). Endogenous Growth Theory (Nelson & Phelps, 1966) posits that an increase in levels of education (e.g. primary, secondary, tertiary) enables individuals to adopt or introduce innovations at a faster rate as they develop abilities to understand, evaluate, and distinguish between promising and unpromising ideas. Therefore, as restaurant owners increase their human capital, it increases their cognitive abilities enabling them to better perceive and exploit profitable innovations which lead to enhanced firm performance (Davidsson & Honig, 2003). In addition, Self-Efficacy Theory (Bandura, 1997) argues that learning from past experience is the most important factor in developing higher beliefs in one’s capabilities. Thus, the more an entrepreneur increases their human capital through gaining education and experience, the greater their self-confidence in their entrepreneurship capabilities to successfully manage their business (Maritz & Brown, 2013).

This study will expand existing knowledge by empirically examining a theoretically derived higher-order model representing the network of relationships among innovation, ESE, human capital, and restaurant performance. Through this approach, we contribute to the tourism and hospitality literature in four ways. First, we expand upon existing knowledge on small and mid-sized restaurant owners and the factors driving their performances. Second, we contribute to a more complete understanding of the effects of innovation on performance, conceptualising innovation to include product, service, process, management, and marketing innovations. Third, we empirically examine a model conceptualising ESE as a higher-order construct compromised of six first-order factors: 1) developing new product and market opportunities, 2) building an innovative environment, 3) defining core purpose, 4) initiating investor relationships, 5) coping with unexpected challenges, and 6) developing critical human resources; and identify the dimensions of ESE that are important in enhancing performance. Fourth, we advance the application of Partial Least Squares Structural Equation Modelling (PLS-SEM) in the context of tourism and hospitality research. Specifically, the research demonstrates the analysis of higher-order molecular models and examines the structural relationships among reflective and formative constructs using cross-sectional data. From a practical standpoint, the research allows restaurant owners to identify areas of business innovation and entrepreneurial capabilities that lead to restaurant success.

2. Theoretical framework

Drawing on the literature on innovation, entrepreneurship, hospitality, and restaurant management, this study adopts a comprehensive integrated framework (see Li, 2007) to examine the drivers of performance in restaurant firms. Understanding the antecedents of restaurant performance requires a holistic, ‘value chain model’ approach. The firms’ value chain is a ‘system of interdependent activities, which are connected by linkages’ (Porter & Millar, 1985, p. 150). The ‘value chain model’ considers a business to have two strategically relevant value creating activities; primary and support activities. Primary activities involve the physical creation of products, the marketing and delivery of these products to buyers, and support and after sales service. Support activities are the inputs that allow primary activities to take place. This involves inputs in the form of purchases, human resources, technologies, and the structure of the firm (Porter & Millar, 1985). In this study, we propose that the firms’ innovation activities, as well as the owner’s ESE and human capital, are critical elements of a restaurant’s value chain. These elements cut across all value creating activities of the firm, for example, new innovations are linked to the restaurants’ primary activities of creating new products and new marketing strategies. It can also affect supporting activities by