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A conceptual business model framework applied to air transport

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ABSTRACT

The adoption of business models in different sectors has been disseminated exponentially as a result of organizational strategies, allowing the identification and definition of paths to be followed, and enhancing capture and value creation for consumers and the enterprise. In the case of the air transport sector, specifically the airlines, the proposition of new business models can contribute to creating competitive advantage. This study develops a conceptual business model framework applied to air transport, which prioritizes key components identified in the literature for designing business models for airlines. With the exploration of different aspects of business models and the identification of the main models used by airlines, the results demonstrate the need for the adoption of new models in this sector.

1. Introduction

In the search for competitive advantage, airlines should consider the need to capture and deliver value to passengers along with the creation of internal value. According to Teece (2010), this can be obtained with the adoption of business models oriented towards competitiveness. These models refer to strategies, activities and performances that a company uses to generate internal and external value to obtain this competitive advantage.

Business models traditionally adopted by airlines, based on the strategies of low-cost or full-service, are insufficient to relate to the new market reality. Gassmann et al. (2014) argue that the recent approach to competition has been based on business models seeing opportunities for innovation and differentiation. Before then, companies from different sectors directed their efforts towards developing innovative products and technologies, but these could be inadequate if they did not have a business model that followed the changing environment.

The search for new ways to operate an airline in the market and deliver value to customers is identified in the study of O'Connell and Williams (2005), which shows this trend and the need for the adoption of new business models in the sector, relating this to key components that must be considered. This trend is also supported by Franke (2007) and Daft and Albers (2013).

Based on the synthesis of the key components identified in the existing literature regarding current conceptualizations of business models, a framework is proposed related to four business model strategies: creating and capturing value, market and advantages of anticipation, hybrid strategy and revenue generation. From the business models identified between the years 2005 and 2014, seven models were selected which were proposed by different authors. These models feature 38 key components. These key components are compared and a conceptual framework is developed to create business models applied to airlines.

2. Business models and air transport

The generation of competitive advantage with the use of new business models can be identified in studies such as those proposed by Achtenhagen et al. (2013) and Markides and Sosa (2013). These advantages can also be observed by the functionality of the business models highlighted by Chesbrough (2010), and the contribution of these instruments discussed by Casadesus-Masanell and Ricart (2010) and Teece (2010), demonstrating the ability of business models to maximize the value creation for companies and their application in different sectors.

Through a longitudinal study of 25 small and medium-sized firms (SMEs), Achtenhagen et al. (2013) identify micro-aspects of successful business model change. The authors conclude that the business model of change is essential for success, allowing companies to adapt to changes in the market and a competitive environment, while at the same time leveraging and building their internal organizations.

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Markides and Sosa (2013) illustrate the competitive advantage gained by airlines entrants or disruptors with new business models in markets created by pioneering companies (such as low-cost, no-frills flying), in which the introduction of a new business model has eroded the advantages of pioneer airlines. According to the authors, new business models of entrant airlines have the potential to erode the sustainability of established companies, regardless of where they operate.

An example of successful business model innovation is Southwest Airlines at the time that it became a new entrant, when the founder surmised that most customers wanted direct flights, low costs, reliability and good customer service, but did not need 'frills'. Aircraft were standardized, allowing greater efficiency and operating flexibility. Southwest's business model was quite distinct from those of the existing major airlines (Teece, 2010).

With the expansion of business models, different concepts have been identified, as proposed by Casadesus-Masanell and Ricart (2010), who summarize the concept of business models as a reflection of the strategy held by the company and extend this concept to the perspective of scholars in a strategy defined as business logic, how it works and creates value for its stakeholders. In this context, it is noteworthy that the business model is not a strategy as proposed by Shafer et al. (2005), but a tool for analysis and reporting of organizational strategies, contributing to the understanding, analysis and communication of possibilities related to defined projects. Meanwhile, Gassmann et al. (2014) summarize the understanding of the business model in four dimensions: Who, What, How and the Value. The synthesis of the concept seeks to provide a clear schema of business model architecture.

The development of a business model involves a process of structuring business activities through flows, and strategic planning of internal and external company resources. DaSilva and Trkman (2013) describe the process of modeling business as the way businesses conduct their operations through graphical representations of activities, events and control flow, allowing the systematic structuring of the company's activities.

A systematic mapping of operations and principal activities in a company helps identify the features of a business model. Chesbrough (2010) argues that a business model enables the company to identify the value proposition, the market segment, the mechanism for generating revenue, the value chain, the cost structure and profit, and sets the competitive strategy whereby the company will gain and maintain advantage over competitors.

The functionalities of the highlighted business models demonstrate the ability of these instruments to enhance the generation of competitive value to business, with the possibility of application in different sectors. Based on these discussed concepts, the business models in this study are adopted as tools for value creation, exploring opportunities and generating competitive advantage. Their applicability to the air transport sector is identified and the results are a conceptual framework of business models for airlines.

Numerous challenges faced by enterprises require the need to seek new ways to reach profitability, value creation and market share. In this context, innovations in business models can be closely linked to a new perspective for the company, with the critical factor related to their suitability to cope with the dynamics of the market and to meet the expectations of its customers. For a better understanding of the business models applied in air transport, the main models used by airlines and the consequent need to search for new business models in the sector are exposed.

The main business models adopted by airlines are traditionally based on low-cost or full-service strategies. Models based on low-cost strategies are characterized by creating value by focusing on what is essential to the value proposition for the passenger. The cost savings are shared with the client and usually result in a customer base with less purchasing power (Gassmann et al., 2014). Companies which have adopted this model can be identified as JetBlue Airways, Ryanair, Southwest Airlines, Virgin Blue, Air Asia and EasyJet (Franke, 2007).

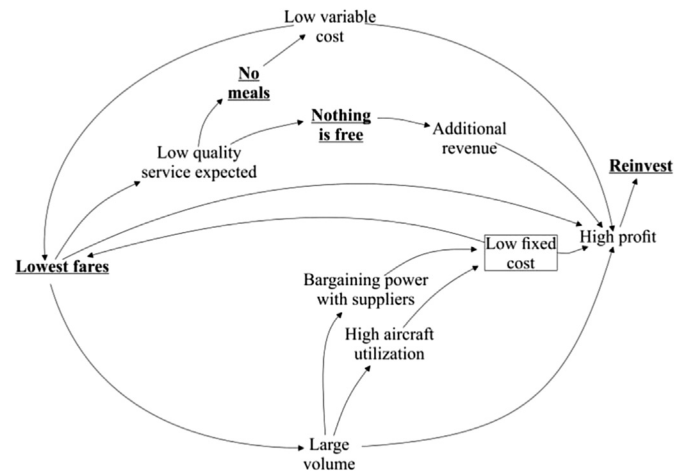

Fig. 1. Simplified representation of the Ryanair business model.
Source: Casadesus-Masanell and Ricart (2010).

Graphical representation of the activities, events and flows of an airline with a business model based on low-cost strategy can be identified in Fig. 1.

The model presented in Fig. 1, based on the low-cost strategy adopted by Ryanair, which in the 1990s was undergoing financial difficulties, demonstrates the company's plan to radically transform the standard model based on full-service strategy into a new model based on low-cost, resulting in success for the organization (Casadesus-Masanell and Ricart, 2010).

Models based on full-service strategy are characterized by offering specific services such as transfers, flights to major airports, business class service, and frequent-flyer programs, among others (O'Connell and Williams, 2005). The tickets are sold with higher added value, which is passed onto consumers and usually results in a customer base with greater purchasing power. Airlines which have adopted this model can be identified as Singapore Airlines, Lufthansa, Malaysia Airlines, British Airways and Cathay Pacific (Franke, 2007). Graphical representation of the activities, events, and flows of an airline with a business model based on full-service strategy can be identified in Fig. 2.

According to Fig. 2 concerning the full-service strategy adopted by Lufthansa, it is noted that the company has evolved successfully as a global company, repositioning its model as an aviation group with a focus on passengers and supported by other business-operating segments as service providers of the company in a network strategy. The main objective of Lufthansa has been profitable growth in the long term, in which efforts have been oriented to strengthen and expand the leading position of the company and its partners in Europe (Jaracha et al., 2009).

A comparison between the past operating profit margins of these two kinds of business strategies is presented in Fig. 3.

Even with the success of low-cost companies, demonstrated by the profitability achieved in the period 1995–2005 in Fig. 3, a paradigm emerges because these companies do not suit the demands for full-services. As a solution to this paradigm toward a hybrid business model, Franke (2007) indicates that the company offering more specialized services with reduced prices stimulates additional demand with the updated service not at the primary level in this sector. However, customer satisfaction must be