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Assessing the air cargo business models of combination airlines

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ABSTRACT

Notwithstanding the fact that the air cargo business is generally a secondary one to the passenger business for combination airlines, it can have an important role to play in their profitability. However, growing challenges are threatening the market positions of the combination airlines. Improving their market positioning depends, amongst other factors, on appropriate business models. Yet, the literature on the air cargo business models of combination airlines is scarce. This paper aims to contribute to closing this gap.

The research presented herein aimed to identify the representative business models of the combination airlines' cargo strategies. Three strategies have been considered. The research method included a series of structured interviews with key informants from combination airlines, namely: TAP Cargo, Brussels Airlines Cargo, SATA Cargo, Turkish Cargo, SWISS WorldCargo, Finnair Cargo, AF-KLM Cargo, Emirates SkyCargo, Lufthansa Cargo and IAG Cargo.

The ten air cargo business models and the representative business models of each strategy are described. The results suggest an overlap between the business models of different strategies. In addition, the results show that an evolution in strategy does not necessarily require a redesign of the business model, but tailored changes in specific components.

1. Introduction

Global air cargo traffic has grown by around 5% per year over the last three decades (BOEING, 2014; Kupfer et al., 2011a). According to Kupfer et al. (2011b), in 2008, the combination airlines[1] accounted for around 50% of the traffic (measured in terms of RTK[2]). Similar figures were recently found by AIRBUS (2015).

The main customers of the combination airlines are service providers such as freight forwarders or GSA.[3] Clancy et al (Clancy et al., 2008). estimated that freight forwarders control around 85% of the retail sales channel for general air cargo, while Hellermann (Hellermann, 2006) indicated an interval between 90% and 95%. In a movement initiated in the 1960s, most combination airlines focussed efforts and resources on the passenger business, consigning the air cargo business to a secondary role (Rhoades, 2014). In a gradual market movement, the air cargo service providers began occupying the space left by the combination airlines (Allaz, 2004). Combination airlines, generally speaking, avoid direct competition with these providers. Firstly, competition would likely damage existing commercial relationships. Secondly, it could entail substantial investments, since combination airlines often lack the means (e.g., know-how, technology, business model) to be competitive in the air cargo market (Allaz, 2004). Such investments may not be affordable (Moorman, 2007).

The cargo market is, nonetheless, a business area that combination airlines are seldom willing to forego. Wide-bodied passenger aircraft, have considerable spare hold space, which, if used to carry freight, can provide an additional source of revenue at a marginal cost. Additional sources of revenue can play a pivotal role with regard to profitability and long-term survivability. By way of example, air cargo revenues accounted (second quarter 2011) for 31% of LATAM Airlines total revenues and around of 35% of shipments were carried in the belly of wide-bodied aircrafts (Casadesus-Masanell and Tarzijan, 2012).

Additionally, air transport business is characterised by marginal profits and cyclical behaviour (Doganis, 2006). The maximum

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[1] Combination airlines are air transport companies that provide both passenger and cargo services. The primary and core business is, however, the transport of passengers. Cargo is normally carried in the hold of the passenger airlines, but the utilisation of combi-aircraft or full-freighters is also possible.
[2] Revenue Tonnes Kilometres.
[3] General Sales Agents.

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return on invested capital for passenger and combination airlines is seldom above 5% per year, which is below the weight average cost of capital (IATA, 2014) and the returns in other competitive industries (Button, 2003, 1996; Doganis, 2006).

In short, whilst it is not considered a core business or even an appealing one, combination airlines are not in a position to simply ignore the air cargo market.

Having knowledge of how to develop adequate strategies and how to design the appropriate business models is of key importance if a company wants to remain competitive and ensure profits (Porter, 1996). A few publications concerning the business of passenger airlines have been published along with methodological proposals (e.g., Daft and Albers, 2015, 2013; Lohmann and Koo, 2013; Pereira and Caetano, 2015).

With regard to the air cargo business, these topics have thus far garnered little attention from academics. Few studies or research projects concerning the cargo strategies of combination airlines are available and we could find none that deals specifically with the business models.

This paper reports the results of research into the business models of combination airlines. The research was aimed at identifying the representative business models, if existent, of the combination airlines' cargo strategies. Strategy and business models are different concepts; however, their actual meanings are still subject to debate amongst scholars (Magretta, 2002). In this research we used Mintzberg and Waters (1985, p. 258) concept of planned strategy.[4] Additionally, the study was based on Casadesus-Masanell and Ricart (2009) hypothesis that a business model is an instrument used to deploy a company's strategy. Hence, airlines pursuing a given strategy should exhibit similar business models. Variations between them are only acceptable to a certain extent. The set of plausible variations establishes the space of the business model of a given strategy and define the representative business model. The design of the actual business model should then take the representative business model into account if the company in question wants to achieve an adequate fit with the respective strategy.

This paper is structured as follows. Section 2 describes the relevant literature on air cargo strategies and general literature on business models, with a particular explanation of the framework deployed to study the business models. Based on the literature review, the research method is described in Section 3, including the sample companies. Section 4 is dedicated to the presentation of results. The framework, chosen in Section 2, is now used to characterise the sample airlines' respective business models and to support identification of the representative business model for each strategy. Finally, Section 5 presents a discussion of the results, concludes the paper and presents some avenues of future research.

2. Relevant literature on business strategy and business models

2.1. Literature on air cargo business strategy

Dewulf (2014) analysed the air cargo strategy of forty-seven selected combination and cargo airlines with varying dimensions and range operations, concluding that there were five main strategies: Basic Service Freighter (BSF), Full Service Freighter Operator (FSFO), Basic Service Combination Carrier (BSCC), Full Service Combination Carrier (FSCC), and Separate Profit and Loss Full Service Combination Carrier (SFSCC). Only the three last strategies were considered in the research presented herein, as they relate to combination airlines. Table 1 characterises each strategy along eleven variables clustered in three dimensions of strategy: product, market and network. There follows a brief review of these three strategies.

Of the three strategies this is the one with the lowest level of commitment. All business decisions are driven by the passenger business. Cargo operations are merely considered a complementary service that serves to enhance the overall group's revenue performance. Combination airlines provide a basic range of products (e.g., track and trace of goods and customs clearance services) that are sold by small sales teams and generate relatively low yields. Air cargo business-related partnerships can be established with other airlines, but their focus is mainly driven by the passenger sector. The cargo is transported in the belly-hold capacity provided by passenger aircraft. The air cargo network (destinations) is defined based on the passenger business. Capacity management procedures seldom exist, making air cargo a marginally priced by-product. One example of such a combination airline is TAP Portugal.

- Full Service Combination Carrier (FSCC) Strategy:

Combination airlines following this strategy provide medium-range product differentiation (e.g., time definitive deliveries), with the services being sold by a professional sales team and a broader range of GSA (or others). Combination airlines in this category tend to follow procedures defined by air carriers in the SFSCC group, applying either marginal or joint product priced cargo services in their passenger network. The air cargo network (destinations) relies heavily on the passenger network, although independent cargo routes can be defined. Most of the cargo is carried in the passenger aircraft. Additionally, for specific cargo routes, ad-hoc chartered freighters may be hired. Whilst this is uncommon, a small fleet of dedicated freighter aircraft may also be used. Air cargo alliances and other partnerships are more common, but also highly dependent on the passenger sector. Examples of such combination airlines include KLM-Air France and British Airways.

- Separate Profit and Loss Full Service Combination Carrier (SFSCC)

This strategy is favoured by combination airlines with the highest level of commitment towards air cargo business. These companies provide a wide range of services and operations (e.g., warehousing, tailored transport and logistic services, and intermodal freight transport services) which are managed and sold by own cargo representatives or even through a subsidiary company. They normally operate a dedicated cargo network that is designed according to market needs. They also source from the mother-company passenger network to the maximum extent possible. Additionally, where needed, they hire out dedicated air cargo services, either to other combination airlines, ad-hoc chartered freighters or air cargo service companies. These types of combination airlines are seen as market makers, that invest in regions that are explored to a lesser extent in cargo terms but also ensure overall operational profit derived from the passenger sector. Examples of combination airlines adopting this strategy include Lufthansa Cargo.

Dewulf (2014) proposal is aligned with previous studies undertaken by Doganis (2006). Table 1 compares the strategies proposed by both authors. Doganis (2006) identified three types of strategies: outsource, unit business and subsidiary. The first of these – the outsource strategy – was not considered by Dewulf. Conversely, parallels can be identified as far as the two remaining

[4] Mintzberg and Waters (1985) defined the concept of planned strategy as a deliberate and intentional set of actions – i.e., plan – that collectively will contribute to the organisation achieving an envisaged market position in the medium to long-term.