# The Impact of a Firm's Business Model Change on Its Competitiveness: From Atlasjet to Atlasglobal<sup>1</sup>

(Research Article)

Firmanın İş Modeli Değişiminin Rekabetçiliğine Etkisi: Atlasjet'ten

Atlasglobal'e

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#### ABSTRACT

# Keywords

Business Model, Competitiveness, Competitive Moves, Competitive Dynamics Literature, Firm Performance

Received: 27.05.2022 Accepted: 08.03.2023 This study scrutinized the business model change of Atlasglobal, having operated in the Turkish airline industry, and attempted to explain in what direction the change affected the firm's financial performance along with its competitive practices. First, the study focused on the change occurring over time to explain the impact in question. Then, we explained the change with the help of the case analysis method within qualitative research design, while a quantitative approach was employed to reveal the impact of the change on the firm success. The results uncovered that the firm's financial performance decreased after the business model change. On the other hand, we concluded that marketing and promotional moves increased financial performance more than other types of moves, while capacity moves reduced the performance compared to others.

#### ÖZET

Bir firmanın sahip olduğu iş modeli değer yaratabilmesini ve rekabet avantajı kazanabilmesini sağlamaktadır. Ancak zamanla iş modelinin istenilen rekabetçiliği yakalayamaması ya da ileride rekabetçi olamayacağının düşünülmesi ile mevcut iş modeli değiştirilebilir. Bu araştırmada havayolu sektöründe faaliyet gösteren Atlasglobal firmasının iş modeli değişimi konu

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Anahtar kelimeler: İş Modeli, Rekabetçilik, Rekabetçi Hamleler, Rekabetçilik, Rekabet Dinamikleri, Firma Performansı

alınmakta ve bu değişimin rekabet uygulamaları ile birlikte firmanın finansal performansına etkisi açıklanmaya çalısılmaktadır. Söz konusu etkiyi açıklayabilmek için süreç ile birlikte süreç içerisindeki değisime odaklanılmıs olup, değisim nitel arastırma tasarımı cercevesinde vaka analizi yöntemi ile açıklanmaya çalışılırken değişimin firma başarısı üzerindeki etkisi ise nicel yöntemle açıklanmaya çalışılmıştır. Araştırma sonucunda iş modelinin performansin değisiminden sonra finansal azaldığı, rekabetci uygulamalarından pazarlama ve promosyon hamlelerinin finansal performansı diğer hamle türlerine göre daha fazla arttırdığı, kapasite hamlelerinin ise finansal performansı diğer hamlelere göre azalttığı sonucuna ulaşılmıştır.

#### 1. INTRODUCTION

The owned business model enables a firm to create value and gain a competitive advantage. However, the current business model can be changed in case it fails to achieve the desired competitiveness over time or upon the thought that it will not be competitive in the future. In the 1990s, this issue attracted more attention with the increase in academic interest in and diverse practices with the business model concept. In practice, the increase in business model innovations and value and competitiveness generated by business models thanks to developing technology have made a successful business model more attractive. However, not every business model can provide the same success and competitiveness in the industry or market.

Although the relevant literature hosts many studies on business models in the airline industry (Bieger, Döring, and Laesser, 2002; Hvass, 2012; Vidovic, Sitimac and Vince, 2013; Taşçı and Yalçınkaya, 2015; Gerede, 2015; Adiloğlu-Yalçınkaya and Besler, 2021), there are significantly few ones on the business model change of a firm, and the competitiveness of a business model is not addressed from the perspective of competitive dynamics. In this research, we examined a firm's business model and competitive practices and attempted to explain the impact of business model change on its competitiveness.

Seeking to identify the impact of the firms' business model change on its financial performance and competitive moves, this study first clarified the concepts of a business model and business model change, business models preferred in the industry, and Atlasjet's transformation process to Atlasglobal. Then, we addressed the conceptual framework of competitive dynamics and discussed the impact of the business model on competitiveness.

#### 2. THEORETICAL FRAMEWORK

The origins of the business model concept date back to Peter Drucker's writings, but it has become prominent in recent years (Casadesus-Masanell and Ricart, 2009: 3). It has become widespread and gained relative momentum since the advent of the Internet in the mid-1990s (Zott et al., 2011: 1022). It is striking that there are various definitions of a business model in the relevant literature (Buyle et al., 2021). The diversity of the current definitions of the concept causes significant difficulties in limiting its nature and components and determining what constitutes a good model but also leads to confusion in terminology because business model, strategy, business concept, income model, and economic model are often used interchangeably (Morris et al., 2005: 726).

Referring to some of the definitions in the relevant literature, Timmers (1998: 2) defines the business model as an architecture for products, services, and information flows, including the definitions of the various business actors and their roles, and a description of potential benefits and sources of income for different business actors. Magretta (2002: 4) delineates the business

model as stories that explain how firms operate. According to the author, a good business model needs to answer Peter Drucker's questions: "Who is the customer?" and "What is customer value?" However, a business model answers questions that should be asked by every manager: "How do we earn from this business?" and "What is the basic economic rationale that explains how we can add value to customers at an affordable cost?" According to Casadesus-Masanell and Ricart (2009: 19), a business model is a reflection of the realized strategies of the firms. The authors assert that a business model covers action plans in tactics, similar to a strategy. Tactics are the modes of action that take place within the boundaries of a firm's business model. Zott and Amit (2010: 216) define the business model as a system of interconnected activities that transcend the main firm and its boundaries. The operating system, on the other hand, enables the firm to create value with its partners and to get a suitable share from this value. A business model shows the design of process content, structure, and management in a way that creates value through taking advantage of business opportunities. It is stated that a firm's business model is a far-reaching innovation center and source of value generation for the firm and its suppliers, partners, and customers (Amit and Zott, 2001: 493).

Although it is not a new story that firms, as sources of value, offer goods or services to different market segments with different business models, they seek how they can elevate their scale and serve more customers at the time they break into the market (Taşçı and Yalçınkaya, 2015: 180). One way firms can commercialize their new ideas or technologies is through business models. Therefore, it is a good business understanding for firms to improve their skills to make changes in their business models (Chesbrough, 2010: 354).

Accordingly, a business model helps to describe how an organization operates and generates income. In other words, it enables managers to conceptualize different activities and value mechanisms that their firms use to create value (Demil and Lecocq, 2010: 228). In short, a business model points to the logic of the firm, the way it works, and how it creates value for its stakeholders (Casadesus-Masanell and Ricart, 2009: 2) since it, as a source of value, helps to explain why some firms perform better than others (Zott and Amit, 2008: 2).

Considering business models in the airline industry, the components of an airline business model come out as the value presented, the way of doing business, and the customers. When these components are combined with the income and expense structure, which is the economic formulation of the way of doing business, and the owned resources and competencies to reach all these, the business model definition becomes more comprehensive and explanatory. Finally, it is essential to include competition within the components of a business model since the competitive strategies in the airline market and the efforts made in this regard have the power to change and affect all elements of an airline business model (Şengür and Şengür, 2012: 4).

A business model, which holds technological features and potentials as inputs and transforms them into economic outputs through customers and markets, provides a consistent framework. Thus, a business model mediating between technology development and creating economic value is seen as a focusing tool (Chesbrough and Rosenbloon, 2002: 532). Morris et al. (2005: 734) also state that a business model can serve as a focus for entrepreneurs and employees when supported by a set of rules derived from authorized decisions. These rules provide a clear idea of the firm's value proposition and are a source of guidance on actions that could jeopardize this value equation.

Although firms do not clearly state their business models, the way they offer their services and how they do business may give some clues about their business models. The general framework of their business models can also be determined by how these firms strategically express

themselves. Strategic positioning statements, such as vision, mission, and values, are essential elements of the job description. In this case, the strategic positioning statements and firm information given by the firm can provide some evidence about its business model (Şengür and Şengür, 2017: 3).

#### 2.1. Business Model Change in Firms

It is known that every firm has a business model since they have some choices generating some consequences, but it does not mean that every business model is satisfactory or even practicable in the long run (Casadesus-Masanell and Ricart, 2009). However, the inability of firms to manage technological change effectively indicates that these firms have difficulties in perceiving and implementing new business models when required by technological demands (Chesbrough and Rosenbloon, 2002: 532). Hence, it is thought that the current business model, which does not create value, does not provide benefits at completing or strengthening basic activities, fails to compete with others, and does not have the quality to change the game in the industry or market, can be replaced with a new one.

Johnson et al. (2010: 71-75) argue that creating a new business model does not mean that the current model is threatened or needs to be changed; instead, a new model often strengthens and completes the core business. Successful firms revise their business models four times towards profitability. However, firms should not reinvent their business models unless they are sure it is significant enough to be worth the effort. Moreover, creating a new business model means only a waste of time and money if it is unique for the firm but not a new or game-changing model for the industry or market. It is also suggested by Zott and Amit (2008: 19-20) that competitive advantage may result from a superior product's position in the market and the firm's business model. A successful business model shows a better route than existing alternatives. It can offer more value to a different customer group or completely replace the old method of doing business (Magretta, 2002: 4). Firms can compete with business models, so a business model can be the source of competitive advantage, and practical models generate value. Business models can also play an essential role in explaining firm performance (Zott et al., 2011: 1029-1030).

#### 2.2. Business Models in the Airline Industry

As the market was liberalized throughout the world, many different models were sought to gain a competitive advantage in the market. As a result of testing these models, a competitive separation was observed in the 2000s as traditional full-service carriers (FSC) and low-cost carriers (LCC). This separation has also changed rapidly over time. Nowadays, the airline industry operates around three models, and firms can be a pioneer in one of these models, as well as switching from one to another. One of these models, ultra-low-cost carrier (ULCC), focuses on creating new demand with low ticket prices. The second, hybrid-low-cost model, is an attractive value center with its service orientation. The last, premium full-service carrier (PFSC), emphasizes a holistic passenger experience and differentiates it (Thomas, 2014: 1-2).

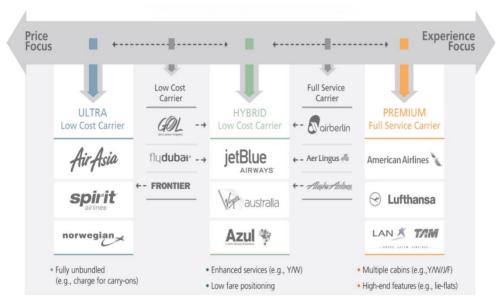


Figure 1. Three Primary Business Models in the Airline Industry

Source: Thomas, 2014.

The business models in the airline industry literature are specified as full-service carriers (high quality), low-cost carriers, charter airlines, and regional carriers (Bieger, Döring, and Laesser, 2002; Hvass, 2012; Vidovic, Sitimac, and Vince, 2013). These models are briefly summarized below.

In line with the aim of serving all passenger market segments in the airline industry, *full-service* (*high quality*) *carriers* operate with the airlines and complex network structures they cooperate with by using global distribution systems thanks to aircraft of different sizes and types (Şengür, 2004: 32). Full-service carriers have a fleet of varying aircraft models, from small regional aircraft to large wide-body aircraft. The geographical coverage of the network includes domestic, intra-European, and long-haul flights focused on the respective home country, and the network structure is in the form of hub-and-spoke. The schedule of this airline business model is based on the wide variety of destinations and high-frequency flights offered through the respective center, while the service spectrum consists of 2-4 passenger class, first-class, and business class with high-level service. Prices, on the other hand, include complex revenue management, a wide range of charges (Vidovic, Sitimac and Vince, 2013).

Low-cost carriers focus on reducing costs to implement a leading pricing strategy in the markets they serve (Vidovic, Sitimac and Vince, 2013). Low-cost carriers are not only cheaper, but they also follow their own specific business models and use younger and homogeneous medium-sized fleets, which results in lower fuel, maintenance, and personnel costs. The pricing policy is often very dynamic in this business model that is characterized by low prices. For example, offering discounts to a person having bought a ticket in advance leads to the opening of markets for passengers who will otherwise travel by other means of transport. The low-cost carriers, initially focusing on short-haul flights in the past, are increasingly expanding their services to mid-haul markets. In general, increasing competition and decreasing service prices are seen in all routes and cities operated by a low-cost airline business model (Bieger, Döring and Laesser, 2002: 71; Vidovic, Sitimac and Vince, 2013). This model is a strategy developed

by newly established airlines to be competitive and hold onto the market by offering low prices against the full-service carriers that previously dominated the market (Gerede, 2015: 199).

The most striking feature among low-cost carriers is a specific, jointly-determined pricing policy. According to this feature, which is called dynamic pricing, the fares are constantly increased as the reservation date approaches the flight date (Avogadro, Malighetti, Redondi and Salanti, 2021). The entry of airline companies into the industry with a low-cost model increases the competition in the industry.

Airline firms that adopt the *regional carrier business model* serve in niche markets. Thus, they need to be flexible, pay attention to their cost structures, and be rather dynamic when scouting new niche markets. The ability to define, develop, dominate, and protect niche markets is the key to their success (Bieger, Döring, and Laesser, 2002: 70-71). They operate between small settlements and large cities, contributing to the development of trade and tourism in these regions. They usually use small airplanes in areas challenging transportation.

Generally, no service concept is adopted in the business model of *non-scheduled* (*charter*) airlines. In this business model, all or parts of the seats on the plane are rented or sold in blocks via tour agencies (Şengür and Şengür 2012: 32). The operation of charter carriers, which mainly serve the tourism demand and market and travel when demanded, is based on price competition. While marketing expenses are low, passenger loading factors are high (Arıkan, 1998: 48). This is a model in which passengers are delivered directly to their destinations without predetermining the return time.

#### 2.3. Business Models in the Competitive Dynamics Perspective

The increasingly intense and dynamic competition makes it difficult to obtain a sustainable competitive advantage. The fact that firms boost their competitive moves to get a share from their competitors transforms their field of activity into a competition-intense environment (Chen et al., 2010: 1411). Competition dynamics literature, which sees competition as a process, focuses on the competitive moves of firms (Smith et al., 1991; Chen and MacMillan, 1992; Miller and Chen, 1994; Baum and Korn, 1999; Chen, 2007; Chen et al., 2010; 2019; Andrevski and Miller, 2020).

Considering competition as a process is about understanding how firms compete with each other rather than which strategy they use (Chen and Miller, 2012: 3), that is, what competitive moves they implement over a certain period of time. Competitive moves are defined as specific and observable action sequences initiated to maintain or improve the relative competitive position (Chen and Hambrick 1995; Ferrier et al., 1999; Grimm and Smith, 1997). In other words, competitive moves are strategy practices such as breaking into a new market, offering a new product or service, or improving available services.

Business models of the firms operating in the airline industry can be predicted by looking through the types of their competitive moves. There are six types of competitive moves in the Turkish airline industry (Sönmez and Eroğlu 2018; 2021):

- Market expansion moves include the actions of adding a new flight destination or increasing the frequency of the available flights, as well as removing some flight points from the flight network and reducing the flight frequencies.
- Pricing moves refer to a discount on the ticket fares or providing advantageous flights with certain criteria, discounts for newly entered markets, an increase in ticket fares, or structural changes in pricing.

- Service moves include offering a new service by the airline firm or providing more benefits by improving the available services.
- Marketing and promotion move include advertising and promotional activities of the firm, sponsorship agreements, social responsibility projects and promotions, and promotions carried out in cooperation with other firms.
- Cooperation moves refer to all collaborations with domestic and foreign airline firms, including network alliances for the development of the industry, sectoral acquisitions and mergers, joint ventures, and partnerships with other industries outside the airline industry.
- Capacity moves consist of the firm purchasing aircraft and creating a transfer center.

The types of competitive moves that firms implement by their business models also vary. In general, firms that follow high-quality business models adopt more capacity, marketing and promotion, market expansion, and cooperation moves than others. Those following low-cost models focus on pricing moves. Since the cost is under the spotlight, marketing moves are kept less in number and narrowed in scope. For charter carriers, the focus is on cooperation with tour firms, and participation in fairs stands out in marketing and promotion moves. Finally, in the regional carrier business model, market expansion moves are less than in other models, the number of all moves is less, and cooperation with competitors is always sought. While trying to determine a firm's business model based on its competitive moves, it is needed not only to know the implemented moves but also the competitive impacts, intensity, and scope of these moves.

#### 2.4. From Atlasjet to Atlasglobal

The firm was founded with the name "Atlasjet" on March 14, 2001 in Turkey to carry out "Non-scheduled Domestic and International Transporation of Passenger and Freight." It made its first flight on June 1, 2001 and started scheduled domestic and international flights in 2004. In Turkey, it was the first IOSA-certified IATA member airline firm and increased its flights by 80 percent in a short time. The firm, which started its activities with only two aircraft, increased its fleet to 16 aircraft. It performed flights to more than 50 destinations in 35 different countries. It carried out scheduled flights from Turkey to Asia, Russia, CIS Region, Middle East, and Europe (www.atlasglb.com, 2019). All of the firm's aircraft were deployed in the fleet by operational leasing method due to the distances between the destinations, frequent destination changes, and its financial structure (Rodoplu et al., 2019: 99).

Tourism activities between Turkey and Europe began to develop rapidly following the second half of the 1980s. Several entrepreneurs who wanted to take advantage of this opportunity entered the tour operator business, preferred the vertical backward integration to increase their flexibility and reduce resource dependency and input costs, and established airline firms. In other words, they preferred to organize airline transportation, which is a component of package tour products they offer. This is why private airlines established in the said period preferred the charter carrier business model. These airline firms had to make an intense effort to grow their tour operator and airline transportation businesses. As a result, they expanded their own markets and refrained from entering the market of scheduled international flights (Gerede 2015: 183).

Atlasjet employed a low-cost strategy to gain a competitive advantage in the market and carried out its activities by emphasizing attractive ticket fares and comfortable flights via television and newspaper advertisements (Torlak et al., 2011: 3405). As it could not create the desired demand on lines with lower-income passenger profiles due to adopting relatively higher prices resulting from its differentiation strategy, Atlasjet turned its head to a network strategy focusing on specific geographical regions. Atlasjet seemed to be implementing a focused differentiation

strategy by organizing flights to tourism destinations from Ataturk Airport, targeting a specific market (Gerede 2015: 202).

In January 2015, the firm announced an update of its corporate identity in line with its growth targets. Within the scope of the update, it was stated that changes were made in all processes of the firm, from its strategy, vision, and goals to the services provided. Moreover, the word "jet" in the firm's name was changed to "global" because it was thought that the word created the image of a low-cost airline. By emphasizing the word "global" in its new name, the firm developed its international flight networks and cooperation and initiated the globalization process of the new brand. Thus, the business model change was announced.

After changing the business model, Atlasglobal emphasized that they were not a low-cost airline, but an airline firm offering "full service" at more affordable rates (dunya.com, 2015). Thanks to the word "global" added in the process of the transition from Atlasjet to Atlasglobal, the firm aimed to become a global airline by increasing its international flights. In this direction, it made many international cooperation and investments. Atlasglobal's business model consisted of a mixed model as "full-service low-cost and charter flights."

In a press release, the firm indicated that there was a significant decrease in passenger revenues with the adverse events in aviation in 2017, but it entered the recovery process and became able to make a profit again in 2018; nevertheless, the fluctuations in the Turkish Lira reduced the demand. It announced that it ceased its flights between November 26 and December 21, 2019 to improve its cash flows. Finally, the firm announced that it filed for bankruptcy on February 14, 2020. Thus, Atlasglobal, which had a twenty-year history in the industry and was shown as an alternative to Turkish Airlines, ended its activities.

Figure 2 below displays Atlasglobal's competitive moves in percentages by years after the business model change. It is noteworthy that the share of marketing moves gradually decreased, while market expansion moves followed a fluctuating course. Figure 3 compares the firm's competitive moves in percentages before (Atlasjet) and after (Atlasglobal) the business model change. After the business model change, the share of capacity moves among all competitive moves increased significantly in percentage. There was a slight increase in market expansion moves. However, marketing and promotion moves showed a severe decrease in percentage.

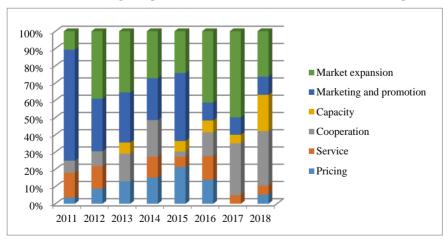


Figure 2. Competitive Moves of Atlasglobal by Years

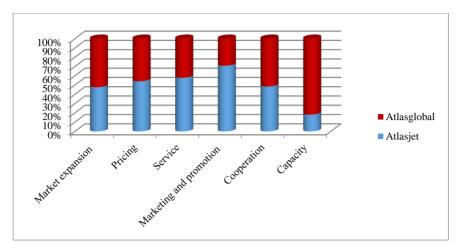


Figure 3. Competitive Moves from Atlasjet to Atlasglobal

Ultimately, this study focused on the process and the changes in the process to explain the impact of business model change on competitiveness. We attempted to explain how the change occurred, rather than what changed, by employing a case analysis method within the qualitative research design. The impact of the change on the firm's success was revealed using a quantitative method.

#### 3. METHODOLOGY

The present study was designed as qualitative research and employed the case study method. Along with other approaches in qualitative research, a case analysis aims to suggest an in-depth understanding of the case in its natural environment, considering its complexity and context. It also has a holistic focus aimed at maintaining and understanding the unity and integrity of the case. In this respect, it is considered a strategy rather than a method (Punch, 2005: 144). The case analysis method creates its own parameters and uses them throughout the study without making a generalization (Tellis, 1997). In this method, case-related data are collected, and all available data are organized according to the case. Associating a single case with various phenomena provides the data with a holistic quality. It also allows for an in-depth examination of specific details that may be overlooked by other methods (Theodorson and Theodorson, 1969). The study adopted an exploratory approach, aiming at revealing and discussing a specific subject limited by hypotheses (Tellis, 1997).

We discussed a business model change from the perspective of competitive dynamics. We inquired about a firm's strategy practices, namely competitive moves, longitudinally, and, thus, explored the impact of the business model change on the firm's competitive moves and whether this impact created a difference in its financial performance. For this purpose, we generated the following hypotheses in light of the competition dynamics literature:

- H1: There is a significant difference between competitive moves and financial performance.
- H2: There is a significant difference between the business model change and financial performance.
- H3: There is a significant difference between the business model change and competitive moves.

#### 3.1. Sample and Data Collection

Atlasglobal constituted the sample of this research. We chosen Atlasgolbal as it operated in a competitive environment, its competitive moves were observable, and its business model was changed in 2015.

First off, regarding the competitive dynamics, we collected data on the competitive moves of Atlasglobal through reviewing the firm's website and announcements and sectoral magazines. Since the firm's business model change took place in January 2015, the research scope included the period from 2011 to the end of 2018, four years before and after the change. In this regard, we obtained 1,752 texts belonging to the firm from the channels mentioned above between the relevant years. While 92% of these texts were sectoral magazines, 8 were generated based on the firm's announcements. The data collected were structured first by the firm's announcements and then sectoral magazines and subjected to content analysis on the basis of the coding system which was generated by Sönmez and Eroğlu (2018) as specific to the Turkish airline industry. In this coding, we grouped competitive moves under six sub-themes: market expansion, service, pricing, marketing and promotion, cooperation relations, and capacity moves. We considered the market share of the firm to be the financial performance indicator and standardized the data.

#### 4. RESULT

This study attempted to test whether the firm's financial performance differed by its business model change and the categories of its competitive moves. We run a factorial ANOVA test on SPSS 22 program to measure the interaction effect of independent variables on the dependent variable.

**Table 1. Descriptive Statistics** 

<b>Competitive Moves</b>	<b>Business Model</b>	Mean	Std. Dev.	N
Market expansion	Atlasjet	.8411533	.24647948	32
	Atlasglobal	-1.0733879	.36521839	35
	Total	1589801	1.01273620	67
Pricing	Atlasjet	.6991980	.44333693	13
	Atlasglobal	7709603	.34146396	11
	Total	.0253755	.84448809	24
Service	Atlasjet	.8364907	.30681009	11
	Atlasglobal	9926534	.35355887	8
	Total	.0663248	.98071802	19
Marketing and	Atlasjet	.9026468	.40241165	44
promotion	Atlasglobal	7862090	.40204951	18
	Total	.4123338	.86976672	62
Cooperation	Atlasjet	.8043804	.28443110	16
	Atlasglobal	-1.2727195	.26236469	17
	Total	2656407	1.08793861	33

Capacity	Atlasjet	1.0588876	.00000000	2
	Atlasglobal	-1.1259821	.39622231	9
	Total	7287330	.95222756	11
Total	Atlasjet	.8467135	.34469524	118
	Atlasglobal	-1.0195122	.38849362	98
	Total	.0000000	1	216

Before the analysis, we checked whether the data provided the assumptions of the factorial ANOVA test. First, any observation score was independent of the scores of other observations. Thus, the assumption of observation independence was provided. Then, the kurtosis and skewness values of the dependent variable were between +2.0 and -2.0 by the groups of independent variables; therefore, the assumption of normal distribution was satisfied (George and Mallery, 2010). Finally, the assumption of homogeneity of variances was met since p>0.05 according to the result of the Levene's Test (p=.140).

Table 1 shows descriptive statistics of the analysis. Accordingly, we realized that the mean financial performance dropped in all competitive moves with the business model change. In addition, the number of competitive moves decreased from 118 to 98 after the business model change. In the tables, the periods before and after the business model change were indicated as "Atlasjet" and "Atlasglobal," respectively.

The results of the factorial ANOVA test revealed that the main effect variables and the interaction variable were significant (Table 2). Accordingly, there was a significant difference between business model change and financial performance (F=809.60; p=.00) and between competitive moves and financial performance (F=3.10; p=.01). Thus, hypotheses 1 and 2 were supported.

According to these findings, in line with the competitive dynamics literature, there is a positive relationship between competitive moves and financial performance (Nadkarni et al., 2016; Andrevski et al., 2014; Katila et al., 2012; Chen et al., 2010; Derfus et al., 2008; Ferrier, 2001; Young et al., 1996). Some studies find a negative relationship between competitive aggressiveness and firm performance (Chen et al., 2010). However, some studies have found a negative relationship between competitive moves and performance, while a few studies have found no relationship. (Hambrick et al., 1996; Chen and Hambrick, 1995; Gnyawali et al., 2006). In addition, the degree of impact of business model change on financial performance was found to be high. According to other studies, there is a positive relationship between change in business model and firm performance (Magretta, 2002; Zott and Amit, 2008; Zott et al., 2011).

**Table 2. Factorial ANOVA Test** 

	Sum of Squares	df	Mean Square	F	p	Partial Eta Squared
Model	189.95ª	11	17.27	140.68	.00	.88
Intercept	.62	1	.62	5.02	.03	.02
<b>Competitive Moves</b>	1.90	5	.38	3.10	.01	.07
<b>Business Model Change</b>	99.38	1	99.38	809.60	.00	.80

Competitive Moves* Business Model Change	1.86	5	.37	3.02	.01	.07
Error	25.04	204	.12			
Total	215.00	216				
Corrected Total	215.00	215				
Total	215.00	216	.12			

a. R<sup>2</sup>= .884 (Adjusted R<sup>2</sup>= .877) (\*p<.05)

We found a significant difference between the interaction of competitive moves and business model change and financial performance (F=3.02; p=.01), thus supporting hypothesis 3. Although many studies have tried to explain the relationship between business model change and competitive advantage (Purkayastha and Sharma, 2016; Zott et al., 2011; Mitchell and Coles, 2003), they have not investigated this issue in terms of its interaction with competitive moves.

**Table 3. Multiple Comparison** 

Competitive Meyes					95% Confidence Interval	
Competitive Moves		Mean Difference	Std. Error	p	Lower Bound	Upper Bound
Market expansion	Pricing	1843556	.08334714	.432	4644282	.0957170
	Service	2253049	.09106427	.299	5313095	.0806997
	Marketing and promotion	5713139*	.06174114	.000	7787836	3638443
	Cooperation	.1066606	.07451070	.842	1437188	.3570400
	Capacity	.5697529*	.11397945	.000	.1867461	.9527597
Pricing	Market expansion	.1843556	.08334714	.432	0957170	.4644282
	Service	0409493	.10758824	1.000	4024796	.3205810
	Marketing and promotion	3869583*	.08422883	.001	6699937	1039230
	Cooperation	.2910162	.09399134	.093	0248242	.6068566
	Capacity	.7541085*	.12756897	.000	.3254366	1.1827803
Service	Market expansion	.2253049	.09106427	.299	0806997	.5313095
	Pricing	.0409493	.10758824	1.000	3205810	.4024796
	Marketing and promotion	3460090*	.09187194	.017	6547276	0372904
	Cooperation	.3319655	.10089762	.059	0070822	.6710132
	Capacity	.7950578*	.13273959	.000	.3490110	1.2411046
Marketing and	Market expansion	.5713139*	.06174114	.000	.3638443	.7787836
promotion	Pricing	.3869583*	.08422883	.001	.1039230	.6699937
	Service	.3460090*	.09187194	.017	.0372904	.6547276
	Cooperation	.6779745*	.07549566	.000	.4242854	.9316637
	Capacity	1.1410668*	.11462576	.000	.7558882	1.5262454
Cooperation	Market expansion	1066606	.07451070	.842	3570400	.1437188

	Pricing	2910162	.09399134	.093	6068566	.0248242
	Service	3319655	.10089762	.059	6710132	.0070822
	Marketing and promotion	6779745*	.07549566	.000	9316637	4242854
	Capacity	.4630923*	.12197927	.015	.0532036	.8729810
Capacity	Market expansion	5697529*	.11397945	.000	9527597	1867461
	Pricing	7541085*	.12756897	.000	-1.1827803	3254366
	Service	7950578*	.13273959	.000	-1.2411046	3490110
	Marketing and promotion	-1.1410668*	.11462576	.000	-1.5262454	7558882
	Cooperation	4630923*	.12197927	.015	8729810	0532036
(*p<.05)						

Table 3 shows the results of multiple comparisons by the categories of the firm's competitive moves. Accordingly, there was a significant difference between marketing and promotion moves and capacity moves by financial performance. The mean financial performance in marketing and promotion moves was 0.57 higher than in market expansion moves, 0.39 than in pricing moves, 0.35 than in service moves, 0.68 than in cooperation moves, and 1.14 than in capacity moves.

The mean financial performance in capacity moves was 0.57 lower than in market expansion moves, 0.75 than in pricing moves, 0.80 than in service moves, 1.14 than in marketing and promotional moves, and 0.46 than in pricing moves. When grouped by financial performance level, competitive moves were divided into three sub-groups as marketing and promotion moves, capacity moves, and other moves (market expansion, pricing, service, and cooperation). Prior research has investigated only one move, such as acquisitions which is a type of collaboration (King and Schriber, 2016), pricing (Roy et al., 1994), and market-entry time (Lilien and Yoon, 1990), rather than comparing performance differences between moves.

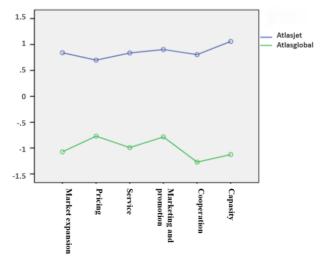


Figure 4. Estimated Marginal Means of the Firm's Performance

Figure 4 shows the interaction between business model change and competitive moves. The fact that the lines on the graph are not parallel to each other indicates that there is an interaction between them. Accordingly, for Atlasjet, the highest financial performance value was in capacity moves while the lowest was in pricing moves. For Atlasglobal, on the other hand, that the financial performance was the highest in marketing and promotion moves while the lowest was in cooperation moves. The financial performance means of competitive moves were close to each other in Atlasjet's business model, whereas differences between them increased in AtlasGlobal's model.

#### 5. DISCUSSIONS AND CONCLUSIONS

We investigated whether business model change and competitive moves affected financial performance from the perspective of competitive dynamics. The results revealed that the business model change had an impact on the firm's financial performance, but this influence decreased the financial performance in this case contrary to what is suggested in the literature (Magretta, 2002; Zott and Amit, 2008; Zott et al., 2011). The change caused a decline in financial performance. Another noteworthy result of the research was the impact of competitive moves on financial performance. Marketing and promotion moves elevated financial performance more than other moves. The mean financial performance in capacity moves was lower than in other moves.

Considering the impacts of competitive moves on financial performance before and after the business model change, we found that the highest financial performance value was in capacity moves while the lowest was in pricing moves before the business model change. After the business model change, we reached the result that financial performance was the highest in marketing and promotion moves but the lowest in cooperation moves. In addition, while the mean financial performance values in competitive moves were close to each other before the business model change, the difference between the means increased after the change.

Regarding the competitive dynamics, it was noteworthy the share of marketing and promotional moves decreased significantly among others in the firm's competitiveness over the years. We found that cooperation and capacity moves increased especially after the business model change. Pricing moves continued to grow in number before the business model change but shrank after the change.

Johnson et al. (2010: 1411) highlight that the business model can be changed to strengthen the competitive position, but the change is just a waste of time and money without a new model that will change the rules of the game in the industry or market. According to Zott et al. (2011: 1030), only a potent business model can be the source of competitive advantage. In this research, we concluded that some changes made without making a radical business model change were not enough to improve competitiveness and even maintain a competitive position.

On the other hand, Chen and Hambrick (1995: 454) assert that the differences in competitive behaviors between small and large-scale firms and the difficulty of creating an advantage in an increasingly competitive environment have not been clarified yet. It was studied for large-scale companies how to display competitive behaviors to gain a competitive advantage. In addition, to be able to explain the reason for the decrease in financial performance, it would be helpful to examine the contextual dynamics of the airline industry, such as the difficulty of competition with Turkish Airlines or Anadolujet in domestic flights, the focus on tourism-oriented charter flights, the relationship of the airline industry with tourism, and the intensification of competition in the industry.

Overall, we determined that the firm's financial performance decreased in all competitive moves after the business model change. Financial performance was lower in capacity moves than in other moves, and marketing and promotion moves increased the firm's financial performance more than other types of moves. Besides, while the number of the firm's competitive moves increased in the industry over the years, it was striking that they decreased considerably after the firm changed its business model.

The study results interestingly coincide with the reasons for Atlasglobal's cessation of its activities for a month in November 2019 and filing for bankruptcy in February 2020. Bankruptcy reasons included the wrong business model and the uncertainty of the model. This research clearly shows that business model change does not act as a magic wand in a firm's tough times.

One of the limitations of this study was its focus on only one case. Further studies may compare multiple cases and explain how a business model can be changed competitively. Another limitation is that the sample included an airline firm. Research on different industries will eliminate the influence of the industry's own dynamics.

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