The Influence of the 4Ps on Passengers' Purchasing Decision-Making: the Case of LCCs
Mohamed R. Ragab Abdelhady    Hanaa Abdel Kader Fayed    Nancy M. Fawzy
Faculty of Tourism and Hotels, Fayoum University

Abstract
The liberalization of air transport industry in the USA by 1978 and then in the early 1990s in the Eu, that was resulted in having the LCCs, has led to significant changes in the global air transport sector. The success of LCCs, and their acquisition of a large market share in the air transport sector are due to the fact that such firms rely mostly on providing the air transport services with a competitive price for passengers. The study pursues to highlight on the experience of LCCs, and the extent of their success in the aviation market. A questionnaire was used to conduct this research. A sample of 292 air passengers participated in this study. The findings indicated that there is a significant relationship between the 4Ps of marketing, namely price, promotion and place, and passengers' purchasing decision-making. Additionally, the results also revealed that price is generally the most important element of the marketing mix affecting the passengers' purchasing decision-making when travelling on board of the LCCs.

KeyWords: low cost-carriers (LCCs), 4Ps, frequent flyer programs (FFPs), global distribution systems (GDSs).

Introduction
The emergence of LCCs has stimulated massive changes in the aviation industry (Bamberger & Carlton, 2006; Bentley, 2008), which played a vital role in enhancing the global competitiveness of airline companies (Hanaoka & Saraswati, 2011; Peoples, 2014), and allowed more people to travel further at an affordable cost (Tang et al., 2014). Furthermore, LCCs take over the market share of full service carriers (FSCs) (Pels, 2008; Gábor, 2010; Westermann, 2012; Sarker et al.,2012; Vasigh & Fleming, 2016). LCCs have rapidly gained market share and presently hold about 24 % of the global aviation capacity (Vasigh & Fleming, 2016), for example, the European and the US legacy airlines have lost a considerable rate of their passengers to LCCs (O'Connell & Williams, 2005; Ko & Hwang, 2010; Nagar, 2013), so LCCs have had a tremendous influence on the air transport market (Forgas et al., 2010; Gross & Lück, 2011), and have become a strong challenge for legacy airlines (Acar & Karabulak, 2015).

The US airline deregulation act of 1978 (Reynolds-Feighan,2001; Ben-Yosef, 2005;Chang et al.,2008;Lee,2008;Belobaba,2009;Wu,2010; Barnhart&Smith,2012) dramatically changed the global financial condition of the airline industry. Soon after the US, other countries also began to deregulate their own industries as mentioned earlier. Prior to 1978, the industry was relatively stable, based mainly on the government’s enforcement of non-competitive regulation and pricing. In the post-deregulation era, the industry took on the more cyclical nature of a competitive industry, where periods of robust financial profitability could be followed by periods of severe economic distress, like other competitive industries (Vasigh & Fleming, 2016). The deregulation of air transport markets in the US, Europe (Smyth & Pearce, 2006; Bieger & Wittmer, 2008), and in other countries, has led to an increase in airline competition on many destinations (Williams, 2002; Smyth & Pearce,2006; Bieger & Wittmer, 2008).This increased competition has been spurred (Eller & Moreira, 2014), particularly by the success of LCCs to compete with legacy carriers (Fourie & Lubbe, 2012; Fageda et al., 2011; Alderighi et al.,2011), which is due to the distinction of their strategies in the aviation industry (Fourie & Lubbe, 2012; Moreno et al., 2015). In 2016, LCCs carried an estimated 1.1 billion passengers, which was approximately 29 per cent of the world total scheduled passengers. This indicated a 10.5 per cent growth when...
compared to the number of passengers carried by LCCs in 2015, one and a half times the rate of the world total (IATA, 2017). Therefore, the study aims to investigate the influence of the 4Ps of marketing, namely product, price, promotion and place, for LCCs on passengers' purchasing decision-making. The study depends on Air Arabia and Nile Air as the pioneers of LCCs in the Middle East.

The findings will improve the performance of LCCs to increase their market share in the aviation market by improving their appeal to passengers.

**Low-cost carriers (LCCs)**

There is no single best definition of low-cost carriers (LCCs), which are also popularly known as no-frills carriers, low-cost airline, discount airlines or budget carrier (Baker, 2013). LCCs typically use one type of aircraft fleet (Vidović et al.2006) with up to 200 seats offering mostly low fares in exchange for eliminating many conventional travelers services(Baker , 2013). The term originated within the aviation industry for airlines with low operating costs or with costs lower than their competitors. Through popular media, the term has referred to any carrier with low ticket prices and limited services regardless of their operating costs (Macário et al, 2007). The concept of LCCs originated in the US (Franke, 2004; Francis et al.,2006; Macário et al.,2007; Thanasupsin et al.,2010; Diaconu & Popescu, 2011; QIN, 2012) with Southwest Airlines at the beginning of the 1970s (Franke, 2004; Srensen, 2005; Strategic Direction, 2006; Macário et al.,2007; Bentley, 2008; Button & Ison, 2008; QIN, 2012; Petrović & Petrović, 2015 ; Malighetti et al., 2016). In Europe, the Southwest model was copied in the 1990s (Macário et al., 2007; Cento, 2008) when the Irish company Ryanair transformed into a low-cost carrier business model (Cento, 2008), previously a traditional carrier, and was followed by other low-cost carriers in the UK (Macário et al. 2007; Keynes, 2008). Since LCCs penetrated the aviation industry, they are of the fastest growing and becoming important part of this sector (Sarilgan, 2016; Snyder & Tai, 2012). All over the world, LCCs have become not only a fixture of the aviation industry but also a major factor of contemporary life (Ros, 2016) and have been the fastest increasing sector of the air transport industry (Campisi et al.2010). According to Low-cost Airline Guide (2014), LCC is defined as "the cheapest means of transportation to take whether you are planning on going around the world in eighty days or just taking a trip down south to visit your parents. It is called a no-frills carrier because it offers low fares to passengers whilst doing away with several traditional passenger services, some of which you may have taken for granted, like free food and drinks. Most airlines have only a single passenger class, and usually feature the Airbus 320’s or Boeing 737’s in their fleet of aircraft”.

Low-cost carriers are not solely driven by price as resulted by economic researches, as one of the reasons to choose LCCs. However, these factors such as airline reputation, social acceptability and service quality underlying by subjective norms have a considerable role in the selection of LCCs and FSCs (Buaphiban, 2015) as well as cost saving and easiness of booking (Ryan & Birks, 2005; Jou et al., 2008). Nowadays, many of LCCs have been established and have become popular as a new style of airline business model (Yabe & Homma, 2016), and the future growth of LCCs will depend on passengers continuing to access LCC websites to purchase air services (Escobar-Rodríguez & Carvajal-Trujillo, 2014). For carriers that have pioneered or actively transitioned to one of the three models, there is almost always a clear customer value proposition and supporting brand ethos for Ultra-low-cost carriers (ULCCs) (L.E.K, 2014), such as Spirit Airlines, AirAsia and Allegiant (Kee, 2015). It is a relentless focus on stimulating new demand with low fares, Case of hybrids (Klophaus et al., 2012), the value-centric appeal with a service orientation, and the premium full-service carriers (PFSCs) proposition that increasingly
emphasize and differentiate around the holistic passenger experience (L.E.K, 2014).

**The air transport market before the emergence of LCCs**

Before the emergence of LCCs, the aviation sector was dominated by two basic types of airlines, traditional and charter carriers. Passengers wishing to travel by air transport faced a more restricted set of options in almost every area of their travelling experience. The legacy carrier would usually offer services with scheduled departure times which would be operated across an entire traffic season. Reservations are made through global reservation systems (GDSs) such as Apollo, Worldspan, Sabre, Galileo and Amadeus, and depend mainly on the use of major airports. FSCs often faced little competition on the routes they operated. There was no tradition of vigorous cost cutting (Civil Aviation Authority, 2006), and usually provided more than one class of service (Civil Aviation Authority, 2006; Alves & Barbot, 2009).

**The world deregulation of the air transport and the emergence of LCCs**

The emergence of a LCCs business model is more significant determinant of the competitiveness of a particular route than the extent of route and hub concentration on that route (Karivate, 2004). In 1978, the airline deregulation took place in the US (Reynolds, 2001; Knorr & Žigová, 2004; Rhoades & Waguespack, 2008; Hüschelrath & Müller, 2011; Diaconu, 2012; Malaval et al., 2014; Peoples, 2014) which allowed plenty of LCCs to join the air transportation sector (Evangelho, 2005; Francis et al., 2006; Njegovan, 2006; Mason & Alamdari, 2007; Macário et al., 2007; Button & Ison, 2008; Malighetti et al., 2009; Sampaio, 2009; Hüschelrath & Müller, 2011; Kawamori & Lin, 2013; Kawasaki & Graham, 2013; Kwoka et al., 2016). Involvement of LCCs in air transport market, not only provides benefits to the growth of the air transport industry, but also has an affirmative influence on travelers satisfaction (Evangelho et al., 2005; Chowdhury, 2007; Sun, 2012; Baker, 2013; ICAO, 2013). In deregulated air transport markets, travelers have many options for their flights (Hanlon, 2007) and the government controls like entry and price restrictions for air carriers are removed, allowing airlines to serve any given route and freely compete with other carriers. In many ways, deregulation is the opposite of regulation. Generally speaking, air fares are substantially decreased, safety is improved, and service quality increases i.e., route frequency, total number of miles flown, on-time performance, frills and amenities (Wensveen, 2012, p. 38).

In the 1990s, after the airlines deregulation in the US, the phenomenon of LCCs Penetrated the European air transport market (Smyth & Pearce, 2006; Gábor, 2010; Rost, 2006). Ryanair and EasyJet were the first airlines in Europe to adopt the LCCs model (Malighetti et al., 2009; Almansour, 2011). For the time being, the European air transport market is characterized by two essential diverse air carriers’ business models: the frill and low cost carriers (LCCs) (Kupka, 2009). Hence, the deregulation of the aviation sector has certainly had the influence of growing the number of LCCs (Wang et al., 2016), which have become a dominant competitor in the air transport industry (Gittell & Kochan, 2006; JIA, 2012). Furthermore, liberalizing the air aviation sector is advantageous so as to attract more competitors to the airline sector, which leads to lower airfares (Smyth & Pearce, 2006; Lin, 2011; Hsu et al., 2016). Figure (1) shows the impact of liberalization on market access to EU by FSCs.
According to EUR-lex(2015), the market share of FSCs in Europe decreased due to the liberalization of air transport sector in the 1990s. In contrast, LCCs made more use of the liberalization of the 5th /7th freedoms and "Cabotage" rights within the EU (EUR-lex, 2015). Figure (2) shows the impact of liberalization on market access to EU by LCCs.

Figure 1: Market access by FSCs to EU market

Source: (EUR-lex, 2015)

A brief history of LCCs

LCCs were introduced by Southwest in the US (Morrell, 2005; Gillen & Taweelertkunthon, 2007) at the beginning of the 1970s (Mason; 2001; Cento, 2008; Doganis, 2010). In the late sixties, the concept of LCCs was presented (Bentley, 2008) by Rollin King and Herb Kelleher, who established the first low frills carriers in the US that was called Air Southwest. They had a thought for new air carriers which would travel between Texan cities of Houston, San Antonio, and Dallas for charges estimated by $20 for one-way trip (Thomas, 2013). In 1971, Southwest began its first low frills carriers (Calder, 2002; Vidović et al.2006; Lauer, 2010; Diaconu & Popescu, 2011; Qin, 2012; diaconu & maxim, 2015). In October 1978, enormous LCCs start-up entered the air aviation sector, after the air transport deregulation in the USA (Kawamori & Lin, 2013).

Southwest Airlines was credited by most air carriers with having been the first successful airline with a consistent concentration on keeping down operating costs to efficiently compete with the incumbent competitors (Mason, 2001; Malighetti et al., 2009; Christ, 2011; Airlineprofiler,
2015). Nowadays, Southwest is considered one of the considerable airlines in the US (Diaconu & Popescu, 2011) as well as the global aviation market with more than 100 million passengers annually (corkery, 2014), serving more than 30 states (Diaconu, 2012). Moreover, there are Approximately 176 airlines worldwide claim to operate as LCCs (Airlineprofiler, 2015). Although LCCs were initially ridiculed as a strange phenomenon (Kuyucak & Sengur, 2011; Airlineprofiler, 2015), they have become a very prosperous concept and has been imitated by numerous air companies (Chiamaretto & Fernandez, 2014; Airlineprofiler, 2015), on account of the rising number of travelers, traffic capacities and sales yield (Airlineprofiler, 2015).

**Causes of the LCCs growth**

Price is a key rival element of LCCs business model (Mburu, 2009; Yeoh & Chan, 2011; Leong et al., 2015). However, it is no longer the only one. LCCs concentrate on other factors, such as (Sabre, 2010):

- Expanding global reach and accessing the targeted market by taking part in the global distribution systems (GDSs).
- Maintaining costs while compensating for increasing charges of airplanes and fuel.
- Promoting passenger traffic service through merge modern services into the current model.
- Transiting global borders through long-haul flights.
- Expanding co partnership, and building multi-channel strategies.

In addition to low airfares and simplified pricing concepts, LCCs introduced unbundling and started offering optional service components for an additional charge. This has again been well marketed under the context of fair pricing. ‘The choice is yours’ has been the message towards the passengers emphasizing that they only have to purchase a service and pay for it when it fits their needs. Low fares, simple price models, and the option of having the choice created an image of being fair. This established trust, which turned into repetitive business and therefore generated the success of LCCs business model that has been observed over the years (Westermann, 2012).

Airline deregulation has significantly affected the airline operations and reshaped consumer purchase behavior (Chan, 2014; Jennifer & Chan, 2014). Customers' choice behavior, when they are purchasing a service or a product, is influenced by numerous factors, such as brand image, value for money, and price. In the aviation industry, passengers' choice behavior, when they contemplate travel, is influenced by other factors, such as service quality, frequent flyer programs (FFPs), airfare price, airline image, and value for money (Park, 2010). According to Milioti et al. (2014), reliability, safety, fare, and helpful staff during flight are the most significant factors that affect airline choice. Thus, understanding air passengers' airlines selection is one of the important issues for network carriers (Suzuki, 2004). And After the emergence of LCCs in the air transport market, passengers have had more options for their air travel (Snyder & Tai, 2012).

Airline services are divided into 4 categories: augmented, potential, expected, and core services. Augmented services are those features that add value to travelers and are beyond travelers' expectations. They are provided by a number of airlines in order to differentiate factors, which is so-called in-flight entertainment (IFE). Potential services are those features which are currently planned for future provision, such as shower room on board. Expected services are those features that are additional to the core product and almost all full service carriers (FSCs) provide them, such as provision of food and drink during the flights. The last is core service which consists of those elements of airline services which makes the organization an airline such as aircraft type and, scheduled, and reliable transport of passengers. Therefore, Augmented services or in-flight
entertainments (IFE), potential services, expected services are not primary factors affecting passengers' choice of Airline. They contribute greatly to passengers' satisfaction with airline services, but core services are the major factor that affects passengers' choice of airline (Alamdari, 1999). Accordingly, safety (Jou, et al., 2008; Vidović, Štimac, & Vince, 2013) convenience, and service quality have a major impact on the choice of airline companies (Jou, et al., 2008). Figure (3) illustrates passengers' map of airline choice.

Figure 3: the impact of in-flight entertainment (IFE) on passengers' map of airline service

![Diagram of airline service map](image)

Source: (Alamdar, 1999)

The experience of LCCs in Europe and the Middle East

The emergence of LCCs empathize the need for many existing airlines to improve their cost efficiency. LCCs have successfully designed a focused, simple operating model around nonstop air travel to and from high-density markets. On the other hand, the FSC model is cost-penalized by the synchronized hub operations (e.g. long aircraft turns, slack built into schedules to increase connectivity) that implicitly accept the extra-time needed for passengers and baggage to make connections. In addition, the FSC business model relies upon highly sophisticated information systems and infrastructure to optimize its hubs (Keynes, 2008).

Low Cost Carriers (LCCs) in Europe

The air transport market is a fast-growing industry (Lohmeier & Hess, 2009; Gupta, 2016) and a main business sector for all the EU (Lohmeier & Hess, 2009). In the 1990s, the low-fare carriers spread to Europe (Allvine et al., 2007) after the deregulation of the European air transport sector, which erased the administrative barriers for airlines in the European Union (Štimac et al., 2012). It radically modified the competitive environment and the nature of airline competition (Cento, 2008); enabled the airlines to strive for new markets; opened the strictly regulated European market; and provided new rights for the airlines operating in the territory of the European Community. LCCs quickly obtained a considerable market share and became a serious rival to the full service carriers (FSCs) (Civil Aviation Authority, 2006). The explanation of LCCs has definitely changed the air transport industry in Europe and, in the future, more changes are expected (Macário et al., 2007). Although flag carriers dominated international aviation in Europe (Barrett, 2005; Kontas & Mylonakis, 2008) over approximately 70 years (Barrett, 2005), LCCs started to challenge the dominance of FSCs (Dennis, 2007; Keynes, 2008) which was translated to better service (Kim & Lee, 2012; Snyder & Tai, 2012) and lower fares for the passengers (Chowdhury, 2007; Francis et al., 2004, 2007; Alwahaishi & Snášel, 2008; Kim &
The deregulation of the European aviation sector contributed to the emergence of the Low-Cost Carriers (Sauter & Nash, 2007; Campisi et al., 2010; Gábor, 2010), and opened the strictly regulated European air aviation sector (Gábor, 2010), which are an increasingly significant for the European air transport sector (Warnock-Smith & Potter, 2005). The continuing growth of travelers’ numbers masks the fact that the European market for low cost carriers is radically changing (Klophaus, 2005). LCCs business model is a pioneering implementation of innovative and creative business concepts in the air transport industry (Sauter & Nash, 2007). The experience of LCCs in Europe can be divided into two major periods in the European aviation sector. The first period extended between 1997 and the mid-2000s, starting from air-transport deregulation and the prosperity in LCCs and tourism in general, until when the phenomenon incorporated vigorous mass-market hard discounts, with the focus on the base price regardless the perceived service quality. The second period spanned the mid-2000s to 2010 including the definitive growth of the phenomenon into all European financial sectors. The phenomenon received spacious coverage in the media, especially with the advent of the crisis of 2008 (Giménez, 2013). The European aviation sector has been swamped by LCCs (Vidović, Steiner, & Babić, 2006). According to ICAO (2014), there are 19 LCCs operating in the European air transport sector. Currently, the low-cost carrier revolution continues to grow constantly and rapidly in all regions of the world (Sorensen, 2005). Few of LCCs developed to the size of the large traditional airlines, considering the number of passengers carried airlines like Ryanair and EasyJet are under the largest 10 airlines in the world (Westermann, 2012).

**LCCs market share in Europe**

According to Investec (2015), the number of air passenger departures through low-cost airlines (LCAs) in Europe increased by 38% in 2012, compared to 5% in 2001, as shown in figure (4). By contrast, departures through FSCs decreased by 68% in 2013, compared to 83% in 2005 (Airlineprofiler, 2015).

![Figure 4: the evolution of the broader LCC movement in the European market](source: Investec, 2015)
Ryanair as pioneered LCCs in Europe
Ryanair is the first largest LCCs (Malighetti et al., 2009; Fageda et al., 2011), the most successful LCCs in Europe (Pitfield, 2007), and one of the world’s largest airlines as measured by international traveller's carried (Diaconu, 2012; CAPA & OAG report, 2014). Ryanair was founded in 1985 (Bentley, 2008; Geller et al., 2013) by the Ryan family (Tony Ryan, Christopher Ryan and Liam Lonergan) with a share capital of just £1. Ryanair launched by operating a small route between Waterford and London. In 1991, Ryanair applied Southwest airlines model (Vidović et al., 2006; Malighetti et al., 2009; RyanAir, 2015) which made Ryanair the first low-cost airline in Europe (Rost et al., 2006; Petrović & Petrović, 2015; RyanAir, 2015).

Ryanair's market share in Europe (in millions)
According to Ryanair (2016), the air traffic of Ryanair grew by 18% to 106.4m passengers in 2016, compared to 90.6m in 2015. Also, load factors raised from 88% to 93% in 2015. Figure (5) illustrates the significant increase in passenger numbers through Ryanair from FY2005 to FY2013.

Figure 5: Ryanair’s passenger growth FY2005-FY2013

LCCs in the Middle East
In the developing countries, LCCs are always attractive to passengers through cheaper airfares due to low cost strategies and diversified revenue sources (Snyder & Tai, 2012). Therefore, LCCs business model has reshaped the traditional airline business model and has significantly changed the competitive dynamics of the air transport industry (O’Connell & Williams, 2005; Malighetti et al., 2016). Moreover, LCCs have become an essential factor supplying national and continental air flight services (Dobruszkes, 2013). The expansion of low-cost airlines has been an air aviation phenomenon (Doganis, 2001; Telegraph, 2016) which has become a fierce competitor to traditional airlines in the Middle East (The Economist, 2013).

The rise of Middle East airlines, in the last 10 years, has been nothing less than meteoric (Ching & Lingblad, 2016). Because LCCs are seeking to achieve growth and profitability in the Middle East region (CAPA & OAG report, 2014), they are working to provide flights with different levels of quality to their passengers (Valido et al., 2013). According to Amadeus (2014) LCCs operated 11% of the total international traffic in the Middle East compared to 5% in the EU, 20% of the total intraregional traffic in the Middle East compared to 49% in the EU, and 6% of the total domestic traffic in the Middle East compared to 32% in the EU over the five years average.
2010-2014, as illustrated in figure 6.

![Figure 6: LCCs’ market share around the world (2010-2014)](image)

Source: (Amadeus, 2014)

Furthermore, LCCs capacity share (ASK) within the Middle East increased by (2.6%) in 2013, compared to (2%) in 2012. (CAPA & OAG report, 2014), and this is illustrated in figure 7.

![Figure 7: LCCs capacity share (% of total seats) within the Middle East](image)

Source: (CAPA & OAG report, 2014)

**Marketing concept**

Marketing is about not only satisfying customers but also delighting them. It is about adding value, quality, and innovation to their experiences but in an Ethical and socially responsible manner (Gosnay & Richardson, 2008). American Association of Marketing (2007) defined marketing as: "the process of planning and executing the conception, pricing, promotion, and distribution of ideas, goods, and services to create exchanges that satisfy individual and organizational objectives". According to Kotler and Armstrong (2011, p. 20), "marketing is all about creating customer value and building profitable customer relationships. It starts with understanding consumer needs and wants, determining which target markets the organization can serve best, and developing a compelling value proposition by which the organization can attract and grow valued consumers".

Kolb (2008), in the other hand, defined Marketing as "planning a product that the customer wants, that is priced correctly, sold at the right location and promoted so that the customer hears the message". Thus, Marketing is a process for (Mcdonald et al., 2011):

1. Defining markets
2. Quantifying the needs of the customer groups (segments) within these markets.
3. Determining the value propositions to meet these needs.
4. Communicating these value propositions to all those people in the Organization responsible for delivering them and getting their buying to their role.
5. Playing an appropriate part in delivering these value propositions to the chosen market segments.
6. Monitoring the value actually delivered

Marketing Mix
The business market is characterized by the presence of competitors in the same industry who provide the same product or service. Hence, business suppliers need to compete with one another so as to survive in the industry. Business providers need to focus on the customers' wants and needs to retain and maintain the long term relationship, and they must know the marketing mix elements that they need to practice in order to attract customers, especially through their purchasing behavior (Wahaba et al., 2016). The reason is that making a mental image of intangible services or products is an incontrovertible significance for marketing mix elements (Ofloc et al., 2015). The concept of marketing mix can be traced back to 1950s (Grönnroos, 1994; Londhea, 2014) when Neil Borden used the term in his philosophy and turned into widely held in 1965 (NetMba, 2010; Aghaei et al., 2014; kadhim et al., 2016). Then, the concept of marketing mix entered into the academic discussions around the1960s (Yeua, et al., 2012).

Marketing mix is a set of steps (Lancaster & Reynolds 2002; Armstrong & Kotler, 2011) and a collection of controllable elements (Kotler et al., 2004) manipulated by marketers in marketing programs designed to implement a target market strategy (Dibb et al.,2012) in order to create and encourage exchanges with consumers and customers (Blythe, 2009). These variables are known as the 4Ps (Wensveen, 2012; Bhasin, 2017) which are often viewed as controllable variables (Zineldin & Philipson, 2007; Ivy, 2008; Shiu et al., 2009; Pour et al., 2013) because they can be changed. The 4Ps also describe the result of the management’s efforts to creatively combine marketing activities (Zineldin & Philipson, 2007). The 4Ps are price, product, promotion, and place (Kotler et al.,2004; Ling, 2007; Mcdonal, 2007; Danyi, 2008; Chelliah & Chin, 2011; Niharika, 2015; Bawa et al., 2016; Lamb et al. 2017). These four variables help the firm in making strategic decisions necessary for the smooth running of any product (Bhasin, 2017). The success of marketing and promotional products relies on the ability of organizations to choose and apply the appropriate marketing mix according to the target markets (Ziyab, 2013). Furthermore marketing success is dependent on making obtained the service or product which shows satisfaction outstanding to that of rivalry (Rajagopal, 2016).

Purchasing decision concept
Purchasing decision was defined by Vrat (2014) as "the process of buying and effective purchasing aims at obtaining the right material in the right quantities, with the right quality, from the right resource, at the right time, and at the right price. This calls for interaction with marketing, engineering, and manufacturing functions". According to Wongleedee (2015), the elements of the marketing mix, in addition to (Suroto et al., 2013) the psychological, cultural, personal, and social variables simultaneously affect the purchasing decision process.

The stages of the purchasing decision process
Purchasing process are simply the factors that affect the customer to purchase and consume
certain product or services. Customers will be facing some external and internal influence factors that make them purchase a certain product. The definition of customer purchasing process goes as the purchasing behavior or the acts of people when it comes to buying a certain product or service (Hammond & James, 2008). According to Lamb et al., (2008), Lutter (2008), and Saylor Academy (2012), customer purchasing process goes through several stages that are as follows:

**Stage (1) Need Recognition**
In this stage, marketers attempt to motivate customers through various advertising media into realizing that they have a need for a service or product.

**Stage (2) Search for Information**
Purchasers try to collect data, from various sources, about the products they want to purchase. Companies that own brands often help customers search for their products or services.

**Stage (3) Products/services Evaluation**
In this stage, purchasers seek to evaluate all products available to trade-off between each other, through the criteria that is adopted by purchasers.

**Stage (4) Product choice and purchase**
Stage 4 is the point at which the purchaser decides what service or product to purchase, and also makes other decisions at this stage, including how and where to buy the product/service and in what conditions.

**Stage (5) Post purchase usage and evaluation**
At this point in the process, the purchaser decides whether the product/service that he purchased is meeting his needs or not. If the purchaser felt dissatisfied about what he had purchased, he might return the item and never buy anything from them again. Or, worse yet, the purchaser might tell his family and friends how bad the product/service was. Therefore, corporations do their best to prevent purchaser's remorse through offering a money back guarantee or stimulating their salespeople to provide advice to purchasers.

**Stage (6) Disposal of the Product**
In general, the matter of how products are being disposed is becoming extremely significant to companies, society and purchasers alike. So, companies seek to take all Precautionary measures to preserve the environment. However, not all customers go through all the purchasing stages when they are determining buying service or product. A purchaser may skip stages (1) through (3) and purchase product/service with no forethought or planning, what is called impulse purchasing (Saylor Academy, 2012).

**Research Framework**
There are (4) elements that served as independent variables under the marketing mix, namely price, product, promotion, and place. Meanwhile, the dependent variable reflects the results of the research, which is passengers' purchasing decision-making. Those elements are used as the research setting in examining the relationship between the 4Ps and passengers' purchasing decision-making, as illustrated in Figure 8.
Research methodology
The study basically adopted the quantitative approach to test pre-determined hypotheses and produce generalizable results. The questionnaire is considered an appropriate strategy to gather demographic information of those travelling on board of LCCs, and to ask general questions about passengers' experience, satisfaction, and loyalty level to the LCCs. Terms were defined firmly to avoid confusion or interpretation so all survey participants would start with a similar understanding of a term, which would leave less chance and variation in personal interpretation. The Questionnaire is broken into FIVE different sections including section A: travel experience, section B: purchasing decision-making process, section C: passengers' choice of the airline, section D: evaluation of the selected airline, and section E: demographic and general information.

Pilot study
In this study, pilot questionnaires were distributed on 20 passengers who travelled on board of Nile Air and Air Arabia as LCCs to check how they understand the questions and to improve its construct and face validity. Afterward, questionnaire was revised to be the final one and ready for collecting data.

Sampling
The participants were selected randomly from the domestic and the international passengers who travelled on board of Air Arabia & Nile Air as the pioneers of LCCs in the Middle East. The questionnaire was distributed during the period from August 2017 to February 2018, through branches of Nile Air and Air Arabia, besides online formats. Questionnaires collected are (292),
with response rate of 76%, as illustrated in table 1.

Table 1: Response rate

<table>
<thead>
<tr>
<th>Distributed Questionnaire</th>
<th>Received Questionnaire</th>
<th>Response Rate</th>
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<tbody>
<tr>
<td>384</td>
<td>292</td>
<td>76%</td>
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The random sample technique was employed in this study to collect data from passengers due its advantage in collecting perceptions and to decrease the bias level in responses. To answer the questions of the study and to test the validity of the hypotheses, the quantitative analysis is employed. The data collected have been coded and put into a database using a statistical method. The study will use appropriate statistical methods and processors that have been made by using the statistical package for social sciences (SPSS), version 23.

**Reliability**

To confirm the reliability of the applied questionnaire, the Cronbach's Alpha test was employed. The results show that Cronbach's Alpha value is 0.870, as shown in table (2). Because Cronbach's Alpha value exceeded 0.7, the researcher has concluded that the scale of the questionnaire is reliable (Nunnally, 1978).

Table 2: Reliability statistics

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<tr>
<th>Cronbach's Alpha</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>.870</td>
<td>64</td>
</tr>
</tbody>
</table>

**Factor Analysis**

Table (3) shows that KMO values is 0.835 greater than 0.8, this indicates that the sample size is adequate for all statistical analysis (Cerny & Kaiser, 1977).

Table 3: KMO and Bartlett's Test

<table>
<thead>
<tr>
<th>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</th>
<th>.835</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bartlett's Test of Sphericity</td>
<td></td>
</tr>
<tr>
<td>Approx. Chi-Square</td>
<td>33301.0</td>
</tr>
<tr>
<td>df</td>
<td>2211</td>
</tr>
<tr>
<td>Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

**Results and discussions**

This part will elaborate more on the findings compiled from the questionnaire which distributed to the respondents who travelled on board of Air Arabia, and Nile Air to investigate the influence of marketing mix elements (4Ps) on passengers' purchasing decision-making.

**Demographic and general information**

**Gender of the participants**

187 respondents of the 292 respondents who made the total number, identified themselves as males, and this represented 64 % of the whole sample size, while 105 females made up 36 % of the sample, as illustrated in table 4.
Table 4: Gender of the participants

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>187</td>
<td>64.0</td>
<td>64.0</td>
<td>64.0</td>
</tr>
<tr>
<td>Female</td>
<td>105</td>
<td>36.0</td>
<td>36.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>292</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

**Purchasing ticket methods**

By using 5 groups, the results show that most travelers depended mainly on internet to purchase the ticket, making up 41.4% (121 respondents). In the second place came travel agents, making up 36% (105 respondents). On the other side, purchasing tickets at the airport was the lowest way, with 2.7% (8 respondents), and this is illustrated in table 5.

Table 5: Purchasing ticket methods

<table>
<thead>
<tr>
<th>Method</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online</td>
<td>121</td>
<td>41.4</td>
<td>41.4</td>
<td>41.4</td>
</tr>
<tr>
<td>Travel agents</td>
<td>105</td>
<td>36.0</td>
<td>36.0</td>
<td>77.4</td>
</tr>
<tr>
<td>Airline office</td>
<td>23</td>
<td>7.9</td>
<td>7.9</td>
<td>85.3</td>
</tr>
<tr>
<td>the airport</td>
<td>8</td>
<td>2.7</td>
<td>2.7</td>
<td>88.0</td>
</tr>
<tr>
<td>Call Center</td>
<td>35</td>
<td>12.0</td>
<td>12.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>292</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

**The chosen airline**

Two groups were selected in this study, the majority of which has travelled on board of Nile Air, making up 68.5% (200 respondents), while the respondents who travelled on board of Air Arabia were the lowest group with 31.5% (92 respondents) due to the relatively small market share in Egypt, as illustrated in table 6.

Table 6: The chosen airline

<table>
<thead>
<tr>
<th>Airline</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Arabia</td>
<td>92</td>
<td>31.5</td>
<td>31.5</td>
<td>31.5</td>
</tr>
<tr>
<td>Nile Air</td>
<td>200</td>
<td>68.5</td>
<td>68.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>292</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

**Hypotheses-Testing**

The study includes (4) hypotheses which are based on the linear relationship and will be tested using multiple linear regression.

Table (7) explains Model Summary

Table 10: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.598</td>
<td>.358</td>
<td>.347</td>
<td>.83401</td>
</tr>
</tbody>
</table>

Table (8) illustrates the results of Analysis of Variance (ANOVA) to verify the significance of analysis model of Multiple Linear Regression.

Table 11: Analysis of Variance (ANOVA)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>35.806</td>
<td>4</td>
<td>8.951</td>
<td>13.509</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>190.171</td>
<td>287</td>
<td>.663</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>225.977</td>
<td>291</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It is remarkable from table (7) that the value of the correlation coefficient between the independent variable (marketing mix elements, 4Ps) and the dependent variable, purchasing decision-making, is (0.598), and the value of the coefficient of determination ($R^2$) is (0.358), and the value of the adjusted coefficient of determination (Adjusted $R^2$) is (0.347), and the value of ($F= 13.509$) of table (8) and a statistically significant (0.000) which is lower than the level of statistical significance ($\alpha=0.05$). This indicates that the combined independent variable (4Ps) is able to explain (34.7%) of the changes that happened in the dependent variable (purchasing decision-making), and the remainder is attributed to other factors. Table (9) illustrates Model Summary of Multiple Linear Regression as well as the Regression Coefficients (Coefficients$^a$).

### Table 12 : Model Summary$^b$ as well as the Regression Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>1.243</td>
<td>0.357</td>
<td>3.487</td>
</tr>
<tr>
<td></td>
<td>Price</td>
<td>-.354</td>
<td>.079</td>
<td>-.365</td>
</tr>
<tr>
<td></td>
<td>Product</td>
<td>.128</td>
<td>.078</td>
<td>.169</td>
</tr>
<tr>
<td></td>
<td>Promotion</td>
<td>.165</td>
<td>.071</td>
<td>.137</td>
</tr>
<tr>
<td></td>
<td>Place</td>
<td>.184</td>
<td>.101</td>
<td>.157</td>
</tr>
<tr>
<td></td>
<td>$R$</td>
<td></td>
<td></td>
<td>.598</td>
</tr>
<tr>
<td></td>
<td>$R^2$</td>
<td></td>
<td></td>
<td>.358</td>
</tr>
<tr>
<td></td>
<td>Adjusted $R^2$</td>
<td></td>
<td></td>
<td>.347</td>
</tr>
</tbody>
</table>

### Discussion of Findings

Accordingly, it can be said that there is at least one independent variable of the independent variables affects the dependent variable which can be a significant variable.

**H1. Airline price significantly influences passengers’ purchasing decision-making.**

Regarding hypothesis 1, It was found from table (9) that there is a presence of a statistically significant standard and non-standard coefficient of linear regression equation on the independent variable (Price), as the value of (t = -4.468) with a statistically significant (0.000) which is lower than the level of statistical significance ($\alpha = 0.05$), which shows the rejection of the null hypothesis and accepting the alternative, which states: "Airline Price significantly influences passengers' purchasing decision-making"; and so, there is a significant of the standard coefficient of linear regression equation whose value amounted to (-0.365), and non-standard is (-0.354).

**H2. Airline service significantly influences passengers’ purchasing decision-making.**

Regarding hypothesis (2), Clearly table (9) insures that the value of (t = 1.649) with a statistically significant (0.060) is higher than the level of statistical significance ($\alpha = 0.05$) which shows the rejection of the alternative hypothesis and accepting the null, which states: "Airline service not significantly influences passengers' purchasing decision-making"; and so, there is no significance of the standard coefficient of linear regression equation whose value amounted to (0.169), and non-standard is (0.128).

**H3. Airline promotion significantly influences passengers’ purchasing decision-making.**

Regarding hypothesis (3), it turns out from table (9) the presence of a statistically significant
standard and non-standard coefficient of linear regression equation on the independent variable (Promotion), as the value of \( t = 2.335 \) with a statistically significant \( (0.020) \) is lower than the level of statistical significance \( (\alpha = 0.05) \), which shows the rejection of the null hypothesis and accepting the alternative, which states: "Airline promotion significantly influences passengers' purchasing decision-making"; and so, there is a significance of the standard coefficient of linear regression equation which its value amounted to \( 0.137 \), and non-standard is \( 0.165 \).

H4. Airline distribution significantly influences passengers’ purchasing decision-making.

Regarding hypothesis (4), It is obvious from table (9) that the value of \( t = 1.820 \) with a statistically significant \( (0.070) \) is higher than the level of statistical significance \( (\alpha = 0.05) \). Which shows the rejection of the alternative hypothesis and accepting the null, which states: “Airline distribution not significantly influences passengers' purchasing decision-making”; and so, there is no significance of the standard coefficient of linear regression equation whose value amounted to \( 0.157 \), and non-standard is \( 0.184 \).

The results of data analysis depict that hypothesis (1) is supported. The regression analysis shows a statistically significant relation (negative) between price and purchasing decision-making. As Hypothesis (2) of the study isn’t supported by the results, the results show that product does not have a statistically significant relation with purchasing decision-making. The regression output of Hypothesis (3) supports the hypothesis presented by the study suggesting a statistically significant relation (positive) between promotion and purchasing decision-making. Regarding hypothesis (4), the results of Hypothesis (4) suggest no statistically significant relation between distribution and passengers' purchasing decision-making as it was expected by the researcher. The study agreed with various studies as it shows that passengers' purchasing decision-making is influenced by the 4Ps, namely product, price, promotion, and place. As findings revealed that price is the most important element of the marketing mix (4Ps) affecting the passengers' purchasing decision-making when travelling on board of LCCs, this point is supported by the study conducted by Rajasekar & Fouts (2009), Diggines (2010), and Yeoh & Chan (2011). In contrast, the researcher does not agree with Buaphiban (2015), who concluded that passengers are not merely driven by price in selecting LCCs.

Conclusion

The study aims to investigate the influence the 4Ps of marketing on passengers’ purchasing decision-making. 292 of passengers were selected from passengers who travelled on board of Air Arabia & Nile Air as the pioneers of low cost carriers (LCCs) in the Middle East. For the purpose of the study, a random sample was employed. The researcher initially identified a number of qualified respondents, i.e., respondents, who met the criterion of having had a recent air travel experience. The questionnaire was distributed during the period from August 2017 to February 2018, Through Branches of Nile Air and Air Arabia as well as E-questionnaire, with response rate 76%. Based on multiple regression analysis, the findings indicated that there is a significant positive relationship between the three elements of marketing mix (Product, promotion and place) and passengers' purchasing decision-making. Furthermore, the results showed that there is a significant negative relationship between the price and passengers' purchasing decision-making. The results also revealed that price was considered the most important criterion for the LCC passengers.
Recommendations for LCCs

1. LCCs should utilize global distribution systems (GDSs) when selling products or services, utilizing GDSs is a must to succeed in the aviation market.
2. LCCs should try to avoid allowing the pricing of their services to become more expensive. Price was considered the most important criterion for the LCCs.
3. LCCs should follow a strategy, either reinvigorate their low cost differentiation strategy or innovate to keep their superiority in the aviation market, despite the bad times associated with a global economy or strategies implemented by main competitors.
4. LCCs should seriously consider entering into alliances with other FSCs and LCCs. As the situation currently stands, LCCs cannot provide nearly enough destinations within their long-haul network to be a serious competitor. An alliance in the form of interlining agreements or code-sharing, while increasing administration costs, will immediately increase the size of LCCs’ international network and make them a much more attractive option for passengers.
5. LCCs should protect their public reputation and image. Protecting price and service quality, as discussed above, will help with public reputation. Accordingly this will help in establishing the LCCs as a reliably low-cost and good service carrier. Reputation management will also help the airline to become more acceptable in the aviation market, leading to a generalized social norm that LCC travel is acceptable.
6. LCCs should create, maintain and publicize their loyalty programs (FFPs) to attract more passengers.
7. LCCs should continue to offer their current broad range of destinations rather than trying to cut back on the number of destinations they serve. LCCs will have to adapt some of the core features of the low-cost business model to compete effectively over long-haul routes.
8. LCCs should remain competitive by providing better air service and comfort to passengers, to maintain and increase their market share.
9. LCCs’ employees need to be retrained for a more efficient system that emphasizes increase in productivity.

References


Academic Research in Business and Social Sciences, 6(4).


