

# Airports as Shopfronts of Tourism Destinations: Awarded Brand Singapore Changi Versus Surviving Istanbul Ataturk



Erkan Sezgin and Gül Nur Demiral

**Abstract** Industrial tourism which is depended on inclusive tours consists of several supplying sectors. Air transportation is one of the primary suppliers of industrial tourism not only because it provides one of the two main components of inclusive tour but also it is maybe the most institutional and industrial supplying sector for tourism. Airports on the other hand, play a shopfront role for the destinations as they are ‘first impressions’ either for the arrival-departures or for the transfers. Considering the importance of airports as shopfronts, the main international Airport in Turkey: Istanbul, Ataturk (IA) is examined in this particular study. Taking the perceptions of both airports’ passengers into consideration, the well-known and permanent five star rated Singapore, Changi (SC) as ‘best in class’ (BIC) is compared with three star rated IA. The results revealed there are significant differences between the perceptions of both airports’ passengers.

**Keywords** Tourism · Airports · Ataturk Airport · Changi Airport · Benchmark

## 1 Introduction

Air transport plays an important role in tourism (Bows et al. 2009). It, in particular, is a type of transportation that improves the long-distance travel facility. According to Rodrigue et al. (2017), air transport is the main form for international tourism, provides easy access to destinations and thus plays an important role in the development of tourism worldwide. UNWTO (2016) reports that 54% of tourist travelled to their destination by air and this demand for air travel is growing rapidly (Leung et al. 2017). Demand by tourists to arrive at a destination leads to enhanced air service and increased air links allow tourists to more readily access a destination. Destinations at all times endeavor to build competitive and magnificent airports equipped with brand new technologies which will be able to overcome the burdens

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of peak times and compete in the industry where tough competition exists (Mammadov 2012). On short-haul voyages passengers may spend more time at the airport than they are in the air and when they arrive at the destination, the airport promotes to their first impression of a destination (Wiltshire 2018). In consideration of the above, it is possible to claim that airports are the first doors to the destination to open by the tourist (Mammadov 2012).

Since the number of passengers is increasing, the roles which airports have been playing are strongly consolidated by covering non-aviation services such as restaurants, shops, cafes, and entertainment (Lu 2014; Tovar and Martin-Cejas 2009). Moon et al. (2017) suggest that four variables of airport physical surroundings, facility aesthetics, layout accessibility, seating comfort, and cleanliness, are the main determinants of customer satisfaction. On the other hand, facilities are just on safe the components and they cannot provide the success without the other components.

The airports should employ various marketing techniques to survive and to stay competitive in the market. One of these—and may be the most famous one—is benchmarking method. There are various studies in the literature about airport benchmarking (Francis et al. 2002; Yoshida 2004; Graham 2005; von Hirschhausen and Cullmann 2005; Tsamboulas and Tatsi 2007; Gillen 2008; Kincaid and Tretheway 2009; Dmitry 2012; Babu 2014; Chung et al. 2015; Guiomard 2016; Cahill et al. 2017; Selvan et al. 2017). According to these studies, airport benchmarking is essential topic for tourism industry.

Another important strategy that needs to be implemented by airport professionals is branding. Paternoster (2008), Tse (2009), Chung et al. (2013), Kamarudin (2014), Castro and Lohmann (2014), Lee and Park (2016), Pawlusz and Polese (2017), Chua et al. (2017) show that branding is also very important issue in airport industry.

Considering the importance of airports as shopfronts, the main international Airport in Turkey: Istanbul, Ataturk (IA) airport's performance is going to be examined in this particular study. For this purpose, airline and airport star rating forum Skytrax's (Skytrax 2017a) data about passengers' perceptions will be used in the study. The well-known and permanent five star rated Singapore, Changi (SC) airport as 'best in class' (BIC) is going to be compared with three star rated IA in order to identify the insufficiencies of IA airport.

## 2 Theoretical Framework

In the literature, the studies mainly focus on the relationship between air transportation and tourism (Wheeler 1991; Turton and Mutambirwa 1996; Lumsdon 2000; Jenkins 2015; Tsui 2017), airports as destinations (Martín-Cejas 2006; Mammadov 2012; Wiltshire 2018) and marketing of airports (Pels et al. 2003; Jarach 2016) as mentioned in the following sections.

## ***2.1 Air Transportation and Tourism***

Air transport and tourism are operationally interlinked (Bieger and Wittmer 2006). They promote ‘demand and cost’ complementariness and support the holistic production of a tourism experience (Papatheodorou 2002). Air travel is naturally related to tourism mainly in terms of international flows, but also for domestic movements in larger countries (Papatheodorou and Lei 2006). The air transportation system has found out new destinations and it has formed new tourism forms, such as long distances trips (Bieger and Wittmer 2006). In addition to these aviation influence the economic development of a country and plays a vital role in supporting tourism (Beifert 2016).

Graham (1996) stated that the demand for air transport is a derived demand depending ultimately on the demand for the overall tourism product. The importance of air travel on tourism demand has been discussed by many researchers (Wheeller 1991; Turton and Mutambirwa 1996; Lumsdon 2000; Prideaux 2000; Becken 2002; ETC 2006, 2007, 2008; Jenkins 2015; Tsui 2017). There are also few studies of the economic impacts of air transportation on tourism (Holloway and Taylor 2006). The presence of an airport in a destination provides both an economic contribution to the region and allows tourists to be attracted to that destination. Button and Taylor (2000) demonstrated that availability of international air services has a positive influence on the economic structures of destinations. Baker et al. (2015) investigated 88 regional airports to determine relation between regional airports and economic growth and found that causal relationship causalities between them. The effects of the airports on regional economic growth have also been studied by Rietveld and Bruinsma (1998), Hart and Mccann (2000), Hakfoort et al. (2001), Brueckner (2003), Percoco (2010), and Button and Yuan (2013). Khan et al. (2017) concluded that availability of air transportation has a positive effect on the incoming tourism index. Finally, Olipra (2012) determined that low-cost airlines can positively affect less famous destinations and can help them to promote and increase the number of tourists.

## ***2.2 Airports as Destinations***

Airports are the areas where passengers have first impressions and perceptions about the destination. According to Martín-Cejas (2006), airports are the first point of contact for passengers when they arrive at the destination. Therefore, airport resources give passengers the first impression about the destinations (Mammadov 2012; Wiltshire 2018) and represent the quality of destinations’ life. Consequently airports should create a positive image in the minds of passengers about the quality of destination. Airports should also provide the essential facilities for the passengers. The facilities that can help the success of the airports could be as follows:

- Minimum queuing times,
- Terminal cleanliness,
- Adequate terminal seating,
- Terminal signs,
- Food & beverages,
- Airport shopping,
- Wi-Fi connectivity,
- Qualified airport staff.

Singapore Changi International Airport has been awarded the world's best airport for five consecutive years (including 2017) by Skytrax World Airport Awards. The main reason for sustainable award is probably the consideration of the facilities listed above. Skytrax is a worldwide benchmark of airport perfection and commonly known as the Passengers Choice Awards (Skytrax 2017b). The other services and facilities that provide the success for Singapore Changi Airport could be airline lounges, internet connection, convenience stores, money changers, transit hotels, passenger meeting services, information and customer service counters, free-to-use rest areas, ground transport concierge, clinics and pharmacies (Changi Airport 2017).

### ***2.3 Airport Marketing***

Airport marketing has been defined as “fundamental step for establishing new -rules of conduct- and later implementing them in a consistent way” (Jarach 2016). Airports may have to compete with other airports (Pels et al. 2003) to gain a place in the market, attract more passengers, provide quality services etc. Benchmarking is one of the techniques used by airports. Benchmarking could be used to compare the performance of one particular company or among different companies in an industry (Chen 2002). In other words benchmarking is the process of determining best practices, understanding their meaning in relation to business, and adapting these practices to help companies improve their performances (Air Cargo Guide 2013).

While benchmarking focused on manufacturing processes in the past, it has been used presently in product development, marketing, sales, customer satisfaction and in the public and private sector and non-profit organizations (IATA 2010). Benchmarking has been used in various ways (assess managerial or firm performance, collaborative benchmarking, price regulation, national policy and supply chain or value chain efficiency) (Kincaid and Tretheway 2009). On the other hand Tsamboulas and Tatsi (2007) mentioned that there are three types of benchmarking for the airport industry: Infrastructure performance, asset performance and service-level performance.

Gillen (2008) claimed that decisions makers can employ the power of benchmarking for operational decisions and long term strategic planning due to airport benchmarking can provide management with comprehensive data and a

consistent analytical methodology. Von Hirschhausen and Cullmann (2005) found out a review of methodologies used for airports benchmarking. They have classified these methodologies as partial approaches and multi-dimensional approaches.

Brand is another important issue in airport marketing. Airport branding is defined as “*what customers and other stakeholders think about the airport and the services and products provided*” or “*the sum total of all the customer experiences at an airport, as perceived by the customer*” (Paternoster 2008, p. 220). According to Marketing Science Institute the airport brand refers to “*airport brand as a degree of influence of airlines and passengers on the selection of a specific airport and contribution of profits followed by it which also suggested that a particular airport brand can bring high reputable business value in term of future earnings*” (Ismail and Berhad 2014, p. 4). Airport branding strategies should consist of the following components: The selection of food and beverage providers; the selection of retail stores; pricing strategies; the architectural design; airport artwork; services, entertainment, and amenities; service staff; logos and slogans (Tse 2009, p. 122).

The airports which are accepted as the most successful across the world usually the ones that successfully adopted the strategic brand category. Airport’s logos, slogans and advertisements should represent the brand whereas they don’t necessarily represent the brand of airport (Paternoster 2008; Kamarudin 2014). SC Airport, for example, is recognized to its outstanding strategic airport brand. The management of the airport realize that strength and the value of brand. Thereby, all the things they do are related to the brand (Kamarudin 2014). Brand of the airports may also contribute to branding of destinations. For instance, SC’s passenger experience, which it’s won nearly 500 awards for, helped establish the entire Singapore brand, not just that of the airport (Skift 2016).

Name of airports’ is another important factor about branding. Airports are named after the city (e.g., Istanbul Ataturk Airport), town or village, region, country, city-state or special administrative region (e.g., Singapore Changi Airport) and tourist destination (Halpern and Regmi 2011). In summary, slogans have significant effect on branding. It can help constitute the image and identity of a product or service (Lee and So 2007). IA Airport, for example, served 32.1 million passengers in 2010, making it among one of the busiest airports in the world. The airport’s 300+ nonstop destination offering added to its convenient location in the city proves it slogan of “Prime Location, Global Gateway” (Istanbul, IATA). The slogan is “Enjoy the Experience” is used by Singapore Changi Airport.

### 3 Methodology

Skytrax is a foundation which scores airlines and airports from one star to five stars by collecting consumer evaluations about airlines, airports, airport lounges, cabin services and caterings (Sezgin and Yuncu 2016). The Skytrax brand is recognized and associated with quality excellence throughout the world by the air transport industry, and Skytrax has become well known among the traveling public with the

**Table 1** Descriptive profiles of respondents

N = 184	n	f (%)
Type of travel		
Arrival-Departure (IA)	44	23.9
Transit (IA)	51	27.7
Arrival-Departure (SC)	58	31.5
Transit (SC)	31	16.8
Type of traveler		
Solo leisure	62	33.7
Couple leisure	38	20.7
Family leisure	51	27.7
Business	33	17.9

airline star rating, World Airline Awards and World Airport Awards (Skytrax 2017a). The foundation declares that there is no relation or integration with any other companies including airlines, hence the foundation is completely independent. The independence of Skytrax may be the most important characteristic which makes the system prestigious in the airline industry. However, the transparency and accuracy of the data announced by its official website (Skytrax 2017a) is another important characteristic which distinguishes the foundation from other evaluators.

Istanbul Atatürk (IA) and Singapore Changi (SC) Airports' evaluation questionnaires announced by "airlinequality.com" of Skytrax were used in this particular study. The data transferred from Skytrax's website (Skytrax 2017a) was processed using the Statistical Package for Social Science (SPSS) version 22.0.

### 3.1 Sample

The subjects of the present study are IA and SC airports which are presumed as "hub airports" in the air transportation literature. The sample of the study are 184 (95:IA and 89:SC) arrival/departure and transit (passengers used airports for transfer will be named as transit in the study) passengers who participated the Skytrax questionnaire during 2015 June and 2017 April. Descriptive profiles of all passengers were demonstrated in Table 1. The visitors of both airports represent 38 different countries who are mainly from United Kingdom (UK) (21.7%), United States of America (USA) (13.6%) Singapore (12%) and Australia (9.8%). As can be seen from the table, IA is more transit airport (27.7%), while SC is used more by arrival/departure (31.5%). On the other hand, 'solo leisure' has the majority with 33.7% when types of travelers are considered.

### 3.2 *Measurement and Data Analysis*

The questionnaires announced on ‘[airlinequality.com](http://airlinequality.com)’ website of Skytrax were used in the present study. Apart from the demographic questions, the respondents were asked to answer 8 five-point scale questions (queuing times, terminal cleanliness, terminal seating capacity, terminal signs, food and beverages, airport shopping, Wi-Fi connection and airport staff) ranging from 1 (least satisfied) to 5 (most satisfied) in order to indicate their evaluations about the airport services.

Table 2 demonstrates descriptive statistics of the data. Cronbach’s  $\alpha$  coefficients of all eight items are found highly reliable (0.94) (Hair et al. 1995). The rest of the variables demonstrated in the Table 2 are related with normality. Kolmogorov-Smirnov’s normality test is recommended for larger samples (>300) whereas Shapiro-Wilk is recommended for smaller samples (Wuensch 2016). The assumption of normality in the observations ( $p > .05$ ) with Levene’s test were met for the data of the study. Box’s test of equality of covariance matrices ( $p = 0.083$ ) also considered acceptable. Among others, tests of the significance of skewness and kurtosis are not considered appropriate with large samples, as very small standard errors will always produce significant results (Linley et al. 2009). According to Tabachnick and Fidell (2011), the skewness and kurtosis values between  $-1.5$  and  $+1.5$  are considered acceptable in order to prove normal univariate distribution. That said, as shown in Table 2, the values of skewness and kurtosis still fall within the acceptable range of  $-1.5$  to  $1.5$ . Hence, the data is accepted appropriate for parametric tests in the present study.

## 4 Findings

Airport services perceptions of arrival-departure and transit passengers who visited IA and SC and the relations of the perceptions have been examined in the present study. Table 3 demonstrates the relations of transit passengers’ perceptions on both SC and IA airports. Results reveal that there are significance on all eight items. Truthfully, these results are not surprising since SC is a permanent five-star airport and IA is a surviving three-star rated. Though, mean scores of each airport would give a latent evidence for such benchmarking. When the distances of the items’ mean ranks are considered on both perceptions, ‘food & beverages’ is the closest (IA:2.41, SC:3.61) one while ‘queuing times’ is the furthest (IA:1.75, SC:4.26). Lowest mean score of SC’s transit passengers is ‘3.52’ (Wi-Fi connection) and lowest score of IA’s transit passengers’ is ‘1.73’ (terminal seating capacity). As can be seen from Table 1, IA is more transit airport (hub airport) and ‘seating’ is essential for such airports. However, the airport capacity is inadequate and terminal extension is no more possible since the airport is in the city center now. On the other hand, both airports have the highest mean scores from ‘airport shopping’ (IA:2.69, SC:4.52) because both countries (Turkey and Singapore) are cheap and popular for shopping.

**Table 2** Descriptive statistics including Skewness and Kurtosis

	Queuing times	Terminal cleanliness	Terminal seating capacity	Terminal signs	Food and beverages	Airport shopping	Wifi connect	Airport staff
Cronbach's $\alpha$	0.94							
Test of Normality (Shapiro-Wilk)	$\rho < 0.001$	$\rho < 0.001$	$\rho < 0.001$	$\rho < 0.001$	$\rho < 0.001$	$\rho < 0.001$	$\rho < 0.001$	$\rho < 0.001$
Box's test of equality of covariance matrices	Box's M = 142.512 $F = 1.194$ $\rho = 0.083$							
Levene's test	$F = 0.760$ $\rho = 0.518$	$F = 0.794$ $\rho = 0.499$	$F = 1.283$ $\rho = 0.282$	$F = 2.086$ $\rho = 0.104$	$F = 0.748$ $\rho = 0.525$	$F = 0.162$ $\rho = 0.922$	$F = 0.883$ $\rho = 0.451$	$F = 1.790$ $\rho = 0.151$
Skewness	Skew. = 0.034 St.Err. = 0.179	Skew. = -0.483 St.Err. = 0.179	Skew. = 0.086 St.Err. = 0.179	Skew. = -0.318 St.Err. = 0.179	Skew. = -0.140 St.Err. = 0.179	Skew. = -0.522 St.Err. = 0.179	Skew. = 0.140 St.Err. = 0.179	Skew. = 0.046 St.Err. = 0.179
Kurtosis	Kurt. = -0.1477 St.Err. = 0.356	Kurt. = -1.269 St.Err. = 0.356	Kurt. = -1.271 St.Err. = 0.356	Kurt. = -1.185 St.Err. = 0.356	Kurt. = -0.995 St.Err. = 0.356	Kurt. = -0.840 St.Err. = 0.356	Kurt. = -1.128 St.Err. = 0.356	Kurt. = -1.423 St.Err. = 0.356



**Table 3** Independent *t* Test results of IA and SC airports transit passengers' perceptions

	Respondent	Mean	Standard deviation	t	Degrees of freedom	Significance
Queuing times	IA	1.75	0.935	-9.888	80	0.000
	SC	4.26	1.365			
Terminal cleanliness	IA	2.12	1.160	-8.900	80	0.000
	SC	4.48	1.180			
Terminal seating capacity	IA	1.73	0.850	-10.254	80	0.000
	SC	3.77	0.920			
Terminal signs	IA	2.33	1.108	-6.026	80	0.000
	SC	3.81	1.014			
Food and beverages	IA	2.41	1.080	-5.037	80	0.000
	SC	3.61	0.989			
Airport shopping	IA	2.69	1.140	-7.545	80	0.000
	SC	4.52	0.926			
Wifi connection	IA	1.78	0.929	-8.672	80	0.000
	SC	3.52	0.811			
Airport staff	IA	1.82	1.014	-7.715	80	0.000
	SC	3.55	0.925			

**Table 4** Independent *t* Test results of IA and SC airports arrival-departure passengers' perceptions

	Respondent	Mean	Standard deviation	t	Degrees of freedom	Significance
Queuing times	IA	1.82	1.105	-9.835	100	0.000
	SC	4.19	1.277			
Terminal cleanliness	IA	2.64	1.143	-12.616	100	0.000
	SC	4.76	0.506			
Terminal seating capacity	IA	2.16	0.939	-11.652	100	0.000
	SC	4.33	0.925			
Terminal signs	IA	2.77	1.217	-10.690	100	0.000
	SC	4.74	0.609			
Food and beverages	IA	2.50	1.000	-9.512	100	0.000
	SC	4.34	0.947			
Airport shopping	IA	2.82	1.187	-7.101	100	0.000
	SC	4.34	0.983			
Wifi connection	IA	1.84	1.033	-9.841	100	0.000
	SC	3.95	1.099			
Airport staff	IA	2.14	1.305	-8.065	100	0.000
	SC	4.17	1.230			

Independent *t* Test results of arrival/departure passengers' of SC and IA airports are shown in Table 4. Results also reveal for arrival/departure passengers that there are significance on all eight items. Mean score distances of both airports' arrival/departure passengers' perceptions are even further that even the closest item 'airport shopping (IA:2.82, SC:4.34) has more than 1.5 point difference. On the other hand 'queuing times' item also has the highest difference for arrival/departures (IA:1.82, SC:4.19). Naturally, the lowest mean score of IA's arrival/departure passengers is

'1.82' with 'queuing times' while lowest score of SC's arrival/departure passengers' is '3.95' (Wi-Fi connection). Lowest mean scores on 'queuing times' and 'terminal seating capacity' is inevitable for smaller but busier IA airport when passenger movements of both airports are considered (IA: 60.1 million in 2016 and SC:58.7 million in 2016). IA airport gets the highest mean score from 'airport shopping' item again (IA: 2.82) while SC's highest mean score is 4.76 (terminal cleanliness).

## 5 Conclusions

Tourism is more associated with marketing and promoting nowadays. On one side, there are 'open museum' cities which are not successfully marketed (e.g. Rome, not in top ten destinations) on the other side, there are also 'artificial destination' cities (e.g. Dubai seventh in top ten destinations) promoted highly effective. The main contribution of the present study lies in its identifying airports as 'shopfronts' for tourism. Accordingly, this study specifically analyses: (1) the performance of IA airport considering Skytrax evaluations (2) whether there are insufficiencies when comparing to a successful permanent five star airport; SC.

### 5.1 *Implications for Theory*

The present study has some certain contributions to the tourism literature. There have been previous studies focusing on the airports and airport marketing in the literature and some of which included airport benchmarking (Chen 2002; Pels et al. 2003; von Hirschhausen and Cullmann 2005; Tsamboulas and Tatsi 2007; Gillen 2008; Jarach 2016). However, this particular study differentiates from them with its method which directly adapted from the most prestigious airport evaluation system. The evaluating eight items (observed variables) and the data's normality were tested in the present study which were not observed in the related literature.

Secondly, airports have never been mentioned as tourism destinations before. The importance of airports as shopfronts and may be as "first impressions" was first stated in this particular study. Consequently, the researchers from also tourism may find airports remarkable for future studies.

Final theoretical contribution of the study is more related with the evaluation systems. Presently, the researches adapting the open results of evaluation systems (for any industry) as data are hardly encountered. This study may encourage evaluation systems for announcing their data as well as researchers achieve necessary information easier.

## **5.2 Implications for Practitioners**

The results of this particular study achieved some interesting applications for practitioners working in both tourism industry and air transportation business. First, tourism professionals including administrations such as ministries, national tourism-travel associations, tourism companies and airline companies can help designing or redesigning airports better for tourists (arrival/departure) and prospect tourists (transit passengers).

Second, state officials considering the importance of airports as shopfronts, can focus on promoting airports especially for prospective tourists (transit passengers). Turkey has a successful promotion example in 2010. Considering Turkey as a bridge between Europe and Asia, the Turkish flag carrier (TK) started with the 'touristanbul' promotion in 2010 which offered free Istanbul city tour to its transit passengers (Sezgin and Kozak 2012).

Finally, more domestic contribution for practitioners is about Istanbul's new airport. Istanbul's new airport which is opening in 2018, claimed to be the largest around the world. However, there is a Dubai International (DU) airport example which is also a huge airport but still scores 2.92 from Skytrax respondents (the lowest mean score from transit passengers) on 'terminal seating capacity'. Therefore, the new Istanbul Airport officials should consider that necessity is more important than pretentiousness.

## **5.3 Limitations and Suggestions for Future Research**

This particular study has some limitations which should be considered for future research. One of the limitations relates to data collection. As mentioned previously, the data of the study was adapted from Skytrax and this could provide addressing the study as 'desk research' for some opportunists. Another limitation could potentially be the method of the study. Since the data is adapted, the exploration and confirmation for unique scale are hardly possible. These insufficiencies abandon creating/learning potential observed variables for the study. Possibly the last, but not the least limitation of the present work, might be the subjects of the study. SC is a permanent five star airport from Skytrax and may be the most suitable for benchmarking as 'best in class (BIC)'. However, the study results reveal that SC is not a modal transit airport (hub airport). Therefore, a future research consisting a five star but also a hub airport would contribute better for developing airports.

## References

- Air Cargo Guide. (2013). *Airport performance benchmarking*. Accessed March 7, 2017, from [http://www.aci-na.org/sites/default/files/chapter\\_8\\_-\\_airport\\_performance\\_benchmarking.pdf](http://www.aci-na.org/sites/default/files/chapter_8_-_airport_performance_benchmarking.pdf)
- Babu, A. (2014). *A study on benchmarking and service quality of Indian airports*. PhD Thesis, Anna University.
- Baker, D., Merkert, R., & Kamruzzaman, M. (2015). Regional aviation and economic growth: Co-integration and causality analysis in Australia. *Journal of Transport Geography*, 43, 140–150.
- Becken, S. (2002). Analysing international tourist flows to estimate energy use associated with air travel. *Journal of Sustainable Tourism*, 10(2), 114–131.
- Beifert, A. (2016). Regional airports' potential as a driving force for economic and entrepreneurship development – case study from Baltic sea region. *Entrepreneurship and Sustainability Issues*, 3(3), 228–243.
- Bieger, T., & Wittmer, A. (2006). Air transport and tourism—Perspectives and challenges for destinations, airlines and governments. *Journal of Air Transport Management*, 12(1), 40–46.
- Bows, A., Anderson, K., & Peeters, P. (2009). Air transport, climate change and tourism. *Tourism and Hospitality Planning & Development*, 6(1), 7–20.
- Brueckner, J. (2003). Airline traffic and urban economic development. *Urban Studies*, 40(8), 1455–1469.
- Button, K., & Taylor, S. (2000). International air transportation and economic development. *Journal of Air Transport Management*, 6(4), 209–222.
- Button, K., & Yuan, J. (2013). Airfreight transport and economic development: An examination of causality. *Urban Studies*, 50(2), 329–340.
- Cahill, C., Palcic, D., & Reeves, E. (2017). Commercialization and airport performance: The case of Ireland's DAA. *Journal of Air Transport Management*, 59, 155–163.
- Castro, R., & Lohmann, G. (2014). Airport branding: Content analysis of vision statements. *Research in Transportation Business & Management*, 10, 4–14.
- Changi Airport. (2017). *Facilities & services*. Accessed April 16, 2017, from <http://www.changiairport.com/en/airport-experience/attractions-and-services.html#nogo>
- Chen, H. L. (2002). Benchmarking and quality improvement: A quality benchmarking deployment approach. *International Journal of Quality & Reliability Management*, 19(6), 757–773.
- Chua, B. L., Lee, S., Kim, H. C., & Han, H. (2017). Investigating the key drivers of traveler loyalty in the airport lounge setting. *Asia Pacific Journal of Tourism Research*, 22(6), 651–665.
- Chung, T. W., Jang, H. M., & Han, J. K. (2013). Financial-based brand value of Incheon international airport. *The Asian Journal of Shipping and Logistics*, 29(2), 267–286.
- Chung, T. W., Ahn, W. C., Jeon, S. M., & Van Thai, V. (2015). A benchmarking of operational efficiency in Asia Pacific international cargo airports. *The Asian Journal of Shipping and Logistics*, 31(1), 85–108.
- Dmitry, P. (2012). Airport benchmarking and spatial competition: A critical review. *Transport and Telecommunication*, 13(2), 123–137.
- ETC. (2006). *European Travel Commission, European Tourism Insights 2005. Including outlook for 2006, a report of the Market Intelligence Group of the ETC no. 2006/1*, Brussels. Accessed April 20, 2017, from [http://etc-corporate.org/assets/pdf/reports/etc\\_report\\_2006\\_for\\_web-final.pdf](http://etc-corporate.org/assets/pdf/reports/etc_report_2006_for_web-final.pdf)
- ETC. (2007). *European Travel Commission, European Tourism Insights 2006. Including outlook for 2007, a report of the Market Intelligence Group of the ETC no. 2007/3*, Brussels. Accessed April 20, 2017, from [http://www.etc-corporate.org/uploads/reports/report\\_full\\_pdf/8/ETC\\_Tourism\\_Insights\\_2007.pdf](http://www.etc-corporate.org/uploads/reports/report_full_pdf/8/ETC_Tourism_Insights_2007.pdf)
- ETC. (2008). *European Travel Commission, European Tourism Insights 2007. Including outlook for 2008, a report of the Market Intelligence Group of the ETC no. 2008/1*, Brussels. Accessed April 20, 2017, from [http://etc-corporate.org/assets/pdf/reports/annualreport2008\\_web.pdf](http://etc-corporate.org/assets/pdf/reports/annualreport2008_web.pdf)

- Francis, G., Humphreys, I., & Fry, J. (2002). The benchmarking of airport performance. *Journal of Air Transport Management*, 8(4), 239–247.
- Gillen, D. (2008). Benchmarking and performance measurement: The role in quality management. In A. M. Brewer, K. J. Button, & D. A. Hensher (Eds.), *Handbook of logistics and supply-chain management (Handbooks in transport)* (Vol. 2, pp. 325–338). Bingley, UK: Emerald Group.
- Graham, A. (1996, September 2–6). Limits to air transport growth: The demand factors. In *PTRC European Forum, 24th European transport forum: Transport policy and its implementation*. Uxbridge, UK. London: Brunel University.
- Graham, A. (2005). Airport benchmarking: A review of the current situation. *Benchmarking: An International Journal*, 12(2), 99–111.
- Guimard, C. (2016). Practical difficulties in airport benchmarking: The case of Dublin Airport. Accessed April 19, 2017, from [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2770070](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2770070)
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1995). *Multivariate data analysis* (4th ed.). London: Prentice-Hall International.
- Hakfoort, J., Poot, T., & Rietveld, P. (2001). The regional economic impact of an airport: The case of Amsterdam Schiphol Airport. *Regional Studies*, 35(7), 595–604.
- Halpern, N., & Regmi, U. (2011). What's in a name? Analysis of airport brand names and slogans. *Journal of Airport Management*, 6(1), 63–79.
- Hart, D. A., & Mccann, P. (2000). The continuing growth of London Stansted airport: Regional economic impacts and potential. *Regional Studies*, 34(9), 875–882.
- Holloway, J. C., & Taylor, N. (2006). *The business of tourism* (7th ed.). London: Financial Times Prentice Hall.
- IATA. (2010). Understanding airport benchmarking. *Analyst Viewpoint*. Accessed April 22, 2017, from [https://www.iata.org/whatwedo/Documents/economics/Tretheway-Kincaid\\_Airport\\_Benchmarking.pdf](https://www.iata.org/whatwedo/Documents/economics/Tretheway-Kincaid_Airport_Benchmarking.pdf)
- Ismail, S. Z. B. S., & Berhad, M. A. H. (2014). Spearheading airport brand awareness and coverage via social media. *Planning and development Malaysia airports holdings Berhad* (pp. 1–12).
- Istanbul, Istanbul Atatürk International Airport (IAIA). Accessed March 15, 2017., from [http://www.ataturkairport.com/tr-tr/basinodasi/documents/ist\\_airport\\_profile.pdf](http://www.ataturkairport.com/tr-tr/basinodasi/documents/ist_airport_profile.pdf)
- Jarach, D. (2016). *Airport marketing: strategies to cope with the new millennium environment*. New York: Taylor & Francis.
- Jenkins, C. L. (2015). Tourism policy and planning for developing countries: Some critical issues. *Tourism Recreation Research*, 40(2), 144–156.
- Kamarudin, R. F. (2014). *Managing customer expectation for passenger service at airport*. Accessed April 13, 2017, from <http://www.aci-asiapac.aero/services/main/18/upload/service/18/self/55cc68cb431f0.pdf>
- Khan, S. A. R., Qianli, D., SongBo, W., Zaman, K., & Zhang, Y. (2017). Travel and tourism competitiveness index: The impact of air transportation, railways transportation, travel and transport services on international inbound and outbound tourism. *Journal of Air Transport Management*, 58, 125–134.
- Kincaid, I., & Tretheway, M. (2009). *Methodology choices for benchmarking airports*. GARS Workshop on Airport Benchmarking. Accessed March 13, 2017, from <https://tr.scribd.com/document/349831755/Methodology-Choices-for-Benchmarking-Airports>
- Lee, Y. K., & Park, J. W. (2016). Impact of a sustainable brand on improving business performance of airport enterprises: The case of Incheon International Airport. *Journal of Air Transport Management*, 53, 46–53.
- Lee, M. Y., & So, D. W. (2007). Corporate-slogans of corporations operating in Greater China. *Corporate Communications: An International Journal*, 12(1), 58–74.
- Leung, A., Yen, T. H. B., & Lohmann, G. (2017). Why passengers' geo-demographic characteristics matter to airport marketing. *Journal of Travel & Tourism Marketing*, 34(6), 833–850.
- Linley, P. A., Maltby, J., Wood, A. M., Osborne, G., & Hurling, R. (2009). Measuring happiness: The higher order factor structure of subjective and psychological well-being measures. *Personality and Individual Differences*, 47(8), 878–884.

- Lu, J. L. (2014). Investigating factors that influence passengers' shopping intentions at airports—Evidence from Taiwan. *Journal of Air Transport Management*, 35, 72–77.
- Lumsdon, L. (2000). Transport and tourism: Cycle tourism – A model for sustainable development? *Journal of Sustainable Tourism*, 8(5), 361–377.
- Mammadov, R. (2012, May 24–26). The importance of transportation in tourism sector. In *7th Silk Road International Conference “Challenges and opportunities of sustainable economic development in Eurasian countries”*. Tbilisi-Batumi, GA.
- Martín-Cejas, R. R. (2006). Tourism service quality begins at the airport. *Tourism Management*, 27(5), 874–877.
- Moon, H., Yoon, H. J., & Han, H. (2017). The effect of airport atmospherics on satisfaction and behavioral intentions: Testing the moderating role of perceived safety. *Journal of Travel & Tourism Marketing*, 34(6), 749–763.
- Olipra, L. (2012, 13–14 June). The impact of low-cost carriers on tourism development in less famous destinations. In *Cittaslow: The value of slowness for the tourism of the future*, Perugia, Italy.
- Papatheodorou, A. (2002). Civil aviation regimes and leisure tourism in Europe. *Journal of Air Transport Management*, 8(6), 381–388.
- Papatheodorou, A., & Lei, Z. (2006). Leisure travel in Europe and airline business models: A study of regional airports in Great Britain. *Journal of Air Transport Management*, 12(1), 47–52.
- Paternoster, J. (2008). Excellent airport customer service meets successful branding strategy. *Journal of Airport Management*, 2(3), 218–226.
- Pawłusz, E., & Polese, A. (2017). “Scandinavia’s best-kept secret.” Tourism promotion, nation-branding, and identity construction in Estonia (with a free guided tour of Tallinn Airport). *Nationalities Papers*, 45(5), 873–892.
- Pels, E., Nijkamp, P., & Rietveld, P. (2003). Access to and competition between airports: A case study for the San Francisco Bay area. *Transportation Research Part A: Policy and Practice*, 37(1), 71–83.
- Percoco, M. (2010). Airport activity and local development: Evidence from Italy. *Urban Studies*, 47(11), 427–443.
- Prideaux, B. (2000). The role of the transport system in destination development. *Tourism Management*, 21(1), 53–63.
- Rietveld, P., & Bruinsma, F. (1998). *Is transport infrastructure effective? Transport infrastructure and accessibility: Impacts on the space economy*. Berlin: Springer.
- Rodrigue, J. P., Comtois, C., & Slack, B. (2017). *The geography of transport systems* (4th ed.). New York: Routledge.
- Selvan, B., Arul, S. T., & Thamarai, N. (2017). Benchmarking for Indian Airlines industry in contemporary market scenario. *Global Journal of Management and Business Research*, 16(12), 18–29.
- Sezgin, E., & Kozak, R. (2012). Surviving in the airline business with a brand image; perception of travel agency ticketing employees on Turkish Airlines. *International Journal of Business and Social Sciences*, 3(12), 290–296.
- Sezgin, E., & Yuncu, D. (2016). The SWOT analysis of Turkish Airlines through Skytrax quality evaluations in the global brand process. In P. Mandal & J. Vong (Eds.), *Development of tourism and the hospitality industry in Southeast Asia* (pp. 65–81). Singapore: Springer.
- Skift, D. P. (2016). *The world’s best airport is getting ready to double in size*. Accessed March 10, 2017, from <https://skift.com/2016/03/25/new-changi-airport-terminal/>
- Skytrax. (2017a). *Latest airport reviews*. Accessed April 24, 2017, from <http://www.airlinequality.com/>
- Skytrax. (2017b). *World airport awards*. Accessed April 3, 2017, from [http://www.worldairportawards.com/Awards/worlds\\_best\\_airport.html](http://www.worldairportawards.com/Awards/worlds_best_airport.html)
- Tabachnick, B. G., & Fidell, L. S. (2011). *Using multivariate statistics* (6th ed.). Boston: Pearson.

- Tovar, B., & Martin-Cejas, R. R. (2009). Are outsourcing and non-aeronautical revenues important drivers in the efficiency of Spanish airports? *Journal of Air Transport Management*, 15(5), 217–220.
- Tsamboulas, D., & Tatsi, C. (2007, 24–28 June). Benchmarking methodology for mid-size airports performance. In *World Conference on Transport Research Society, 11th World Conference on Transport Research*. Berkeley, California, France.
- Tse, I. A. (2009). *An empirical study of airport branding at selected Canadian international airports*. MBA, University of Calgary.
- Tsui, K. W. H. (2017). Does a low-cost carrier lead the domestic tourism demand and growth of New Zealand? *Tourism Management*, 60, 390–403.
- Turton, B. J., & Mutambirwa, C. C. (1996). Air transport services and the expansion of international tourism in Zimbabwe. *Tourism Management*, 17(6), 453–462.
- UNWTO. (2016). *Tourism highlights*. Accessed May 3, 2017, from [http://www.dadoséfatos.turismo.gov.br/images/pdf/estatísticas\\_indicadores/UNTWO\\_Tourism\\_Highlights\\_2016\\_Edition.pdf](http://www.dadoséfatos.turismo.gov.br/images/pdf/estatísticas_indicadores/UNTWO_Tourism_Highlights_2016_Edition.pdf)
- von Hirschhausen, C., & Cullmann, A. (2005, 24–25 November). Questions to airport benchmarkers – some theoretical and practical aspects learned from benchmarking other sectors. In *German Aviation Research Society Workshop, Benchmarking and airport competition*. Vienna, Austria.
- Wheeler, B. (1991). Tourism's troubled times. *Tourism Management*, 3(2), 91–95.
- Wiltshire, J. (2018). Airport competition: Reality or myth? *Journal of Air Transport Management*, 67, 241–248.
- Wuensch, K. L. (2016). *Skewness, kurtosis and the normal curve*. Accessed December 22, 2016, from <http://core.ecu.edu/psyc/wuenschk/docs30/Skew-Kurt.docx>
- Yoshida, Y. (2004). Endogenous-weight TFP measurement: Methodology and its application to Japanese-airport benchmarking. *Transportation Research Part E: Logistics and Transportation Review*, 40(2), 151–182.