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Full Research Papers should contain original research not previously published elsewhere. They should normally be between 4,000 and 7,000 words although shorter or lengthier articles could be considered for publication if they are of merit. The first page of the papers should contain the title and the authors' affiliations, contact details and brief vitae (of about 50 words). Regarding the following pages, papers should generally have the following structure: a) title, abstract (of about 150 words) and six keywords, b) introduction, c) literature review, d) theoretical and/or empirical contribution, e) summary and conclusions, f) acknowledgements, g) references and h) appendices. Tables, figures and illustrations should be included within the text (not at the end), bear a title and be numbered consecutively. Regarding the referencing style, standard academic format should be consistently followed. Examples are given below:

- Airbus (2003), *Global Market Forecasts 2003-2022*, Toulouse: Airbus.
- Fragoudaki, A., Keramianakis, M. and Jancovich, S. (2005) The Greek PSO Experience. *4<sup>th</sup> International Forum on Air Transport in Remoter Regions*. Stockholm, May 24-26.
- Forsyth P. (2002a), 'Privatization and Regulation of Australian and New Zealand Airports', Journal of Air Transport Management, 8, 19-28.
- Papatheodorou, A. (2008) The Impact of Civil Aviation Regimes on Leisure Market. In Graham, A., Papatheodorou, A. and Forsyth, P. (ed) *Aviation and Tourism: Implications for Leisure Travel*, Aldershot: Ashgate, 49-57.
- Skycontrol (2007) easyJet welcomes European Commission's decision to limit PSO abuse in Italy. 23<sup>rd</sup> April. Available from: http://www.skycontrol.net/airlines/easyjet-welcomeseuropean-commissions-decision-to-limit-pso-abuse-in-italy/ (accessed on 22/08/2008).

*Industry Perspectives* are usually shorter than full research papers and should provide a practitioner's point of view on contemporary developments in the air transport industry. Contributors should explicitly specify whether their views are espoused by their organization or not.

Conference Reports should be between 1,000 and 1,500 words. They should provide factual information (e.g. conference venue, details of the conference organizers), present the various programme sessions and summarize the key research findings.

*Book Reviews* should be between 1,000 and 1,500 words. They should provide factual information (e.g. book publisher, number of pages and ISBN, price on the publisher's website) and critically discuss the contents of a book mainly in terms of its strengths and weaknesses.

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# A. Full Research Papers

Oluwaferanmi Oguntona, Kay O. Ploetner, Marcia Urban, Raoul Rothfeld and Mirko Hornung

Besides the significance of estimating aircraft seat capacity for airline operating cost and yield estimation as well as for the conceptual design of aircraft, airline fleet planning requires an understanding of aircraft cabin configuration. This paper presents the impact of airline business models, market segments in terms of flight distances, and geographical regions on aircraft cabin configuration, i.e. aircraft seat capacities and installed seats per cabin class. Using the historical databases of global low-cost carriers and airline flight schedules between 2000 and 2016, two ABM clusters – full-service network carriers (FSNCs) and low-cost carriers (LCCs) - were developed, while using seven already-developed passenger-aircraft clusters. Focusing on the jet commuter (JC), narrow-body (NB) and long-range (LR) aircraft clusters, studies were conducted on the historical development of aircraft cluster seat capacities at different abstraction levels; global, airline business model, intra- and inter-regional flight distances, as well as a combination of ABM and (inter)regional flights. Selected results were further analysed using statistical tests on the mean and regression analysis. The analysis results show that LCCs use aircraft that have less average scheduled and less average maximum possible seats than FSNCs. Specifically, FSNCs use significantly bigger aircraft types in LR cluster than LCCs, while LCCs use significantly bigger aircraft types in JC cluster than FSNCs. Furthermore, average cabin utilisation of aircraft clusters scheduled by LCCs are significantly higher than average cabin utilisation scheduled by FSNCs. With increasing distance, average cabin utilisation also significantly reduces.

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#### Deborah Ancell

Airlines are corporately socially and environmentally responsible (CSER). Unlike predecessor 'CSR', CSER acknowledges the importance of the environment. CSER-managed airlines obey the law, service customers safely, manage employees fairly, reward owners appropriately, pay suppliers promptly and mitigate environmental impacts. Unlike philanthropy (i.e. CSERplus), airlines' CSER-management is underpinned by economics – the optimal allocation of resources. External pressures push airlines to go beyond economically-viable, strategic investments to make philanthropic donations which are voluntary, discretionary contributions purportedly to If the CSERplus philanthropic contributions are non-strategic they further their interests. could increase costs without any benefit. Husted and Salazar (2006) determined three motivations for corporate entities to engage in strategic CSERplus (philanthropic) activities: either to (a) prevent unfavourable government intervention (b) create product differentiation to increase sales or (c) trigger cost reductions. Content and theme analysis of the top 10 airlines' CSER reports indicated that none of the three motivations applied to their Philanthropy appeared to support the altruistic or egoistic philanthropic contributions. interests of managers rather than the airlines. There were no success measures. philanthropic donations appeared to increase costs at a time when many airlines were reducing services and products to remain competitive. The conclusion is that airline philanthropy is an expense rather than an investment. This paper contributes to the paucity of current literature on philanthropic motivations and airline CSER management.

Weiyang Sun, Wei-Chuen Wallace Ong and Zhao-Wei Zhong

We studied a methodology for flight trajectory optimization, and also the workloads of air traffic control officers (ATCOs). Case studies were conducted through simulations for flight trajectory optimization. The aircraft model was A320-200s, which is pre-dominantly utilized in Southeast Asia for short to medium range flights. Fuel savings were computed for selected routes and were compared with that of existing operations and flights simulations, which revealed significant fuel savings. The research also determined the coefficients of ATCOs' workloads and demonstrated dynamic sectorization in selected airspace of Southeast Asia. It was found that dynamic sectorization was more efficient than static sectorization in balancing the workloads of ATCOs, reducing the standard deviation by 50% and the balance of workloads among sectors by 12.9%.

#### Khaula A. Alkaabi

With increased demand for air travel, airports have become economic engines of the regional development that connect aviation systems with other modes of transportation facilitating the movement of people and cargo. Originating air passengers account for the majority of passenger trips to and from an airport and have different ground access needs. Since the air transportation is interrelated to ground transportation, studying ground access mode choice of airport users is a crucial part of airport management and system planning. The purpose of this study is to identify Dubai International Airport (DXB) ground access mode characteristics and users located in the United Arab Emirates (UAE), which has not been studied previously. Although there are many different modes of transportation serving the airport, yet personal vehicles are the main mode used to arrive to the airport. Binary logistic regression models are developed to evaluate access mode choice for originating air travellers focusing on the mix between private vehicle and public transportation system (taxi, limousine, bus network, and Dubai metro) using data collected specifically for this study. A total of 1012 air travellers were interviewed and completed the questionnaire in December 2014. Models result showed that access mode choice is significantly affected by different socio-economic characteristics of travellers including income, nationality, household size, vehicle ownership; and different trip characteristics that include number of travellers and how often air travellers use public transportation in their community.

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to the use of sponsorship is the growing role of social media networks that can be utilized with traditional media and event marketing activities to leverage the impact of the sponsorship. However, the extent of involvement in sports, the leading area of sponsorship activity, and across other events by the world's major air carriers varies greatly. This review examines the reported sponsorships engagements in sports by leading global airlines at the airline's web site.

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The purpose of this research is to identify the determinants of cross-border investment in the airline industry, focusing on the intangible assets and resources which airlines possess and the institutional differences between home and host countries. The empirical results indicate that airlines have fewer incentives for making foreign investment in other airlines in institutionally different countries and culturally different countries. Furthermore, government restriction on foreign ownership in the host country may discourage airlines to pursue investment in such country. The results weakly support a hypothesis that the more intangible assets airlines possess, the more they may be induced to make FDI. We interpreted the results as follows: the FDI decision of the airline industry may be accounted for by Dunning's Eclectic Paradigm model just as other industries may be; the institutional difference may have an overwhelming impact on airlines for their FDI decisions; and further studies may be necessary in scrutinizing the role of intangible assets of airlines.

# **B.** Conference Report

#### **EDITORIAL**

# SELECTED PAPERS FROM THE 21<sup>st</sup> AIR TRANSPORT RESEARCH SOCIETY WORLD CONFERENCE, Antwerp, 2017

The 21st Air Transport Research Society World Conference (ATRS) was held in Antwerp, from July 5th to July 8th, 2017 and attracted up to 220 papers for presentations. This special issue of the Journal of Air Transport Studies collects six selected papers representing a variety of topics presented and discussed at the conference.

In the first paper, **Oluwaferanmi Oguntona**, **Kay O. Ploetner**, **Marcia Urban**, **Raoul Rothfeld**, and **Mirko Hornung** investigate the impacts of airline business models, market segments, and geographical regions on aircraft cabin configuration in terms of aircraft seat capacities and installed seats per cabin class. Using historical data covering the period of 2006-2016 for global fleet of scheduled aircraft, and airlines categorized into full-service network carrier (FSNC) and low-cost carrier (LCC), they find that the configuration and utilization of an aircraft cabin varies by flight distance and airline business model, and the cabin preferences of FSNC and LCC are different in different aircraft clusters.

Airline philanthropy is the topic of the second paper authored by **Deborah Ancell**. Built upon an extensive literature review about the corporate social responsibility (CSR) and thematic analysis, this paper attempts to determine whether the motivation for airlines' philanthropy is strategic investment or it is merely an expense. The dissection explores the contributions of the top 10 airlines (and in some cases, their passengers) in one financial year (2015-16) to various charitable endeavours based on the airlines' corporate social and environmental responsibility (CSER) reports. The three motivations of philanthropic activities include the prevention of unfavourable government intervention, product differentiation for sales increase, and cost reduction. The results, however, does not provide evidence in support of the accomplishment of any of these motivations. The author concludes that airline philanthropy is not an investment, but an expense only for the altruistic or egoistic interest of airline management.

The third paper collected in this issue is written by **Weiyang Sun, Wei-Chuen Wallace Ong and Zhao-Wei Zhong**. They present a methodology of optimizing flight trajectory for fuel savings, and conduct simulation using A320-200 aircraft on a route from Singapore to Cambodia. The simulation results validate the least amount of fuel consumption associated with the use of optimal flight trajectory. In addition, the authors also investigate the structural determinants of air traffic control officers (ATCO) workloads, and suggest that the adoption of dynamic sectorization is better than static sectorization in balancing the workloads of ATCOs and reducing the workload variation.

In the fourth paper, **Khaula A. Alkaabi** conducts a survey among 1,012 air travellers flying out of Dubai International Airport (DXB) in December 2014 about their choices between private vehicles and public transportation systems in accessing the DXB airport. Binary logistic regression models are estimated and the results suggest the access mode choice is significantly affected by various social-economic characteristics of travellers such as income, nationality, household size, and vehicle ownership and different trip characteristics including the group size of traveling and the frequency of travellers of using public transportation. However, variables such as age, trip purpose, cost, and time are found to have no significant effect on travellers' airport accessing mode choice. The author discusses policy implications from these results and suggests several measures that can be adopted by city planners and administration to help enhance travellers' use of public transportation in accessing the airport.

Airline sponsorships and sports are explored by **Blaise Waguespack** and **Scott Ambrose** in the fifth paper of this issue. The authors examine the role of one of the oldest marketing tactics, namely sponsorship, and how new technological approaches are being employed jointly with the increasing use of sports marketing by airlines around the world for the task of airline marketing. The airline examples they investigate provide prefatory evidence showing that the growing use of social media along with traditional media and event marketing activities can leverage the effectiveness of the sponsorship marketing employed by leading global airlines.

The last (but certainly not least) paper in this issue is by **Nobuaki Endo** and **Toshiya Ozaki**. The authors study the foreign direct investment (FDI) activities in the global airline industry, an important but understudied topic in the aviation literature. Using airline-country dyad data sampled among 90 top airlines in 2015 and the largest 90 economies in the world in 2014, the authors identify and estimate the determinants of FDI in the airline industry with a consideration focusing on intangible assets and resources an investing airline possesses and the institutional differences between home and hosting countries. The estimation results suggest that cross-border investment in the airline industry is deterred by government foreign ownership restriction, and institutional and cultural differences. On the other hand, the hypothesis that FDI will be more likely when an airline has greater intangible assets is moderately supported. Overall, the authors conclude that the Dunning's Eclectic Paradigm can also be applied in studying the FDI decisions made by airlines, just like in other international business settings.

We would like to extend our thanks to all these authors and all the reviewers for their hard work and contribution to this ATRS special issue of Journal of Air Transport Studies. We believe that these works are providing a valuable contribution to the aviation practitioners as well as encouraging further research on the respective topics.

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