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UCF Rosen College of Hospitality Management,
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Zayed University, United Arab Emirates

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M.A. Hossain^{*1}, N. Jahan², Y. Fang³

¹Hajee Mohammad Danesh Science and Technology University, Bangladesh, ²Chonbuk National University, Republic

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Wellington Institute of Technology, New Zealand

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University of Birmingham, UK

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Victoria University, Australia

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N. Singh¹, D. Singh^{*2}

¹*Clarion University of Pennsylvania, USA*, ²*University of Central Florida, USA*

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S. Barakat, E. Wada*

University Anhembi Morumbi, Brazil

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X. Tran¹, B. Le², M. Nguyen^{*2}

¹*University of West Florida, USA*, ²*Duy Tan University, Viet Nam*

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K. Thirumaran^{*1}, S. Goh², J.K. Sabharwal¹

¹*James Cook University, Singapore*, ²*Auckland University of Technology, New Zealand*

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J. Jang^{*1}, H. Kwon²

¹*Kansas State University, USA*, ²*Oklahoma State University, USA*

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P. Mura

Zayed University, United Arab Emirates

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T. Jeeradist

Kasem Bundit University, Thailand

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N. Gandhi^{*1}, S. Jain¹, P. Prakash¹, A. Shastri²

¹*ZS Associates, India*, ²*ZS Associates, USA*

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R. Sainaghi*¹, R. Baggio²

¹Università IULM, Italy, ²Bocconi University, Italy, ³National Research Tomsk Polytechnic University, Russia

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A. Acampora, R. Merli*, M. Preziosi, M.C. Lucchetti

Roma Tre University, Italy

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S. Kim

Western Kentucky University, USA

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C. Álvarez-Abelo, R. Hernández-Martín, N. Padrón-Fumero*

Universidad de La Laguna, Spain

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University of Central Florida, USA

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T. Borges-Tiago*^{1,2}, F. Tiago¹

¹University of the Azores, Portugal, ²Advance/CSG, Portugal, ³CEEApIA, Portugal

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X. Fu*, A.D.A. Tasci, A. Fyall

University of Central Florida, United States Minor Outlying Islands

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R. Singh¹, A. Ismail¹, P. Sibi¹, D. Singh*²

¹Pondicherry University, India, ²University of Central Florida, USA

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M. Farboudi Jahromi*, A.D.A. Tasci, S. Sonmez

University of Central Florida, USA

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Consumer reactions to dynamic pricing of theme parks

G. Panse*, A.D.A. Tasci, A. Milman

University of Central Florida, USA

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R.M. Back*, A.D.A. Tasci

University of Central Florida, USA

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D. Kwun, J. Hahm*, J. Kang

University of Central Florida, USA

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Y. Niu*, H. Gibson

University of Florida, USA

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A. Farmaki*, P. Christou

Cyprus University of Technology, Cyprus

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V. Shapoval, E. Yost*, C. Wen

Rosen College UCF, USA

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P. Christou*, E. Hadjielias, A. Farmaki

Cyprus University of Technology, Cyprus

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Creating the experience

E. Mullins

Walt Disney World Hotels & Resort, USA

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Cross-citation and research topics in the sharing economy

R. Sainaghi*¹, R. Baggio^{2,3}

¹*Università IULM, Italy*, ²*Bocconi University, Italy*, ³*National Research Tomsk Polytechnic University, Russia*

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A.D.A. Tasci*¹, G. Aktas², F. Acikgoz³

¹*University of Central Florida, USA*, ²*Dokuz Eylul University, Turkey*, ³*Istanbul Technical University, Turkey*

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L. Ding

Institut Paul Bocuse, France

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L. Zhang*¹, W. Wei²

¹*Michigan State University, USA*, ²*University of Central Florida, USA*

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C. Baker*², M. Hover¹, X.D. Lub^{1,3}, L. Calvi¹

¹*Breda University of Applied Sciences, The Netherlands*, ²*University of Central Florida, USA*, ³*Nyenrode Business Ur*

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Destination branding: User generated versus marketing generated videos

F. Tiago^{*1,2}, F. Moreira¹, T. Borges-Tiago^{1,2}

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Destination orchestration capability development towards sustainable value creations

B.B. Idisondjaja^{*1,2}, S. Wahyuni¹, H. Turino¹

¹Universitas Indonesia, Indonesia, ²PPM School of Management, Indonesia

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G. Oren¹, A. Shani^{*2}, Y. Poria²

¹The College of Management, Israel, ²Ben-Gurion University of the Negev, Israel

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M. Kang

University of Nebraska-Lincoln, USA

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Y. Chao^{*}, A.D.A. Tasci, X. Fu, J.Y. Park

University of Central Florida, USA

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L.C. Harris^{*}, A.D. Pressey

University of Birmingham, UK

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Does high tourism specialization improve efficiency of traditional travel agencies? Evidence from China

D-P. Zhang^{*1}, Y. Ma²

¹Zhongnan University of Economics and Law, China, ²Chinese Academy of Sciences, China

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Early career hospitality industry employees' perceptions and outcomes of gender equality

M.R. Kim^{*1}, Y. Koh¹

¹Michigan State University, USA, ²University of Houston, USA

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S. Maertens

German Aerospace Center, Germany

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J. Ha¹, J. Park^{*2}

¹San Jose State University, USA, ²University of Central Florida, USA

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Effect of exchange rate volatility on Sri Lanka's inbound tourism

G. Rathnayake

Central Bank of Sri Lanka, Sri Lanka

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Effect of multiple mediating variables on the relationship between Tourism development and Quality of Life

D. Daal^{*1,2}, J. Ridderstaat³

¹InterContinental University of the Caribbean (ICUC), Curacao, ²Curacao Tourist Board, Curacao, ³University of Cei

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Effects of price and income elasticities on hotel market demand

X. Tran

University of West Florida, USA

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M. Mohamed*, Y. Ibrahim

Helwan University, Egypt

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Dinesh Basnet

Lincoln University College, Malaysia

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A. Grobelna

Gdynia Maritime University, Poland

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Empathy, gratitude and prosocial behaviour as determinants of souvenir consumption

S. Hosany¹, S. Deesilatham^{*2}, Z. Rahman¹, L. Altinay³

¹Royal Holloway, University of London, UK, ²University of Thai Chamber of Commerce, Thailand, ³Oxford Brookes University, UK

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Empirically grounded agent-based models in tourism

J.A. Baggio^{*1}, R. Baggio^{2,3}

¹University of Central Florida, USA, ²Bocconi University, Italy, ³Tomsk Polytechnic University, Russia

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M. Fitzpatrick

Georgetown University, USA

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M. Rivera*, K. Semrad, R. Croes, J. Ridderstaat, V. Shapoval, M. Altin

University of Central Florida, USA

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V. Patil Gaude

Goa University, India

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E. Díaz*, A. Esteban, R. Carranza, D. Martín-Consuegra

University of Castilla-La Mancha, Spain

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L. Zhang*, S. Yang

Guangdong University of Finance & Economics, China

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Examining travel information acquisition and travel preferences by different age groups in aging population

S. Kang, C. Pai*

Macao University of Science and Technology, Macao

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Experiential learning in the hospitality classroom

J.L. Hiller*¹, J.L. Forney², E.A. Brown²

¹Missouri State University, USA, ²Iowa State University, USA

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Explore the visual clues of the tourist hotel's wellness service images

T.W. Tang¹, Y. Lu², C.L. Tsai³, T.C. Wang*³

¹Asia University, Taiwan, ²University of Kentucky, USA, ³National Cheng Kung University, Taiwan

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Exploring customers intention to continue using self-service technology based on the theory of innovation adoption

C. Pai*¹, S. Kang¹, T. Wang²

¹Macau University of Science and Technology, Macao, ²University of Illinois, USA

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Exploring generation Zs food ordering behaviors using delivery apps

Q. Zhou, Y. Choe*, J. Lin

University of Macau, Macao

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T. Spyriadis

Manchester Metropolitan University, UK

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Exploring the advertising attraction of wellness service marketing

T.C. Wang¹, P. Zhang², C.L. Tsai¹, T.W. Tang*³

¹National Cheng Kung University, Taiwan, ²University of Kentucky, USA, ³Asia University, Taiwan

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R. Lagiewski*, L. Ehinger

Rochester Institute of Technology, USA

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T. Pilving*, T. Kull, M. Suškevits, A. Viira

Estonian University of Life Sciences, Estonia

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Feminist leadership dynamics in Chinese hospitality industry: Antecedents of philosophical ethics of personality trait

L. Wu*, R. Hashim

Taylor's University, Malaysia

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Food allergic customers' perceived risk, trust and purchase intention for dining out in the U.S.

H. Park*¹, J. Niser²

¹Purdue University Fort Wayne, USA, ²Fairleigh Dickinson university, USA

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Food labelling in Ontario restaurants

M. Holmes¹, R. Bennett*²

¹University of Guelph, Canada, ²George Brown College, Canada

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M. Sigala

University of South Australia, Australia

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From shared mobility to shared lifestyles - understanding whether and how household car sharing practices are spread

E. Farstad*, I. Landa Mata

Institute of Transport Economics, Norway

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From zero to hero: A journey toward an experienced online reviewer

Y. Yang^{*1}, X. Zhang¹

¹*Temple University, USA, ²Harbin Institute of Technology, China*

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T. Borges-Tiago^{*1,2}, F. Tiago^{1,3}

¹*University of the Azores, Portugal, ²CEEApIA, Portugal, ³Advance/CSG, Portugal*

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Gender differences in apartment sharing in Germany

K. Bremser^{*2}, M.M. Alonso-Almeida¹

¹*Autonoma University, Spain, ²Pforzheim University, Germany*

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Global outlook of trends in the attractions industry

J. Hallenbeck

IAAPA, USA

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Great Barrier Reef tourism: A successful framework for jellyfish safety

L. Gershwin^{*1}, L. Crowley-Cyr²

¹*Australian Marine Stinger Advisory Services Pty Ltd, Australia, ²University of Southern Queensland, Australia*

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Have the emerging concepts restrained the power of Eurocentrism? A case of the Chinese tourist gaze

M. Li^{*}, G. Chen

Sun Yat-sen University, China

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Hospitality and corporate mobility: A study on experience, satisfaction and loyalty on moving process

A.B. Cautela Gouvêa^{*}, E. Kyoko Wada

Universidade Anhembi Morumbi, Brazil

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Hospitality and quality of life at work: Validating a structural model of satisfaction/well-being in the group's gender SEM

C. Stefanini^{*1}, E. Wada¹, B. Costa^{2,3}, A. Olim¹

¹*Universidade Anhembi Morumbi, Brazil, ²Universidade de São Paulo, Brazil, ³Universidade Nove de Julho, Brazil*

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Hospitality and sustainability in Brazil: The challenges of public administration on the brink of corruption

R. Marques, A. Yamashita^{*}, E. Wada

Universidade Anhembi Morumbi, Brazil

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Hospitality Culture: The final frontier

A. Pizam

University of Central Florida, USA

SUNDAY, DECEMBER 15, 2019: [K04] Abraham Pizam, Rosen College of Hospitality Management, University of Central Florida, USA - 13:50-14:50
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Hospitality: Validating a structural model of satisfaction and loyalty across gender, age and education: Multigroup &

C. Stefanini^{*1}, C. Alves¹, R. Marques¹, E. Wada¹, M. Coelho^{2,1}

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How can message framing strategies encourage diners to prevent food waste at all-you-can-eat restaurants?

Y. Huang^{*1}, E. Ma²

¹San Jose State University, USA, ²University of Massachusetts-Amherst, USA

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How do the sustainability applications are being perceived by different types of hotel guests?

F. Memarzadeh^{*}, S. Anand

San Jose State University, USA

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How local's attitude contributes to tourists' attachment to the destination

X.N. Zhang, F. Meng^{*}

University of South Carolina, USA

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How to measure the economic contribution of cruise tourism development to coastal regions- the theoretical approach

J. Kizielewicz

Gdynia Maritime University, Poland

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Human images in hotel websites: Its effects on customers' cognitive, emotional, attitudinal and behavioral outcome

D. Bufquin^{*1}, J-Y. Park¹, R. Back¹, S.J. Lee², M. Nutta¹

¹Rosen College of Hospitality Management, University of Central Florida, USA, ²School of Foundations, Leadership

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Human resources practices in the hotel industry: A comparative approach between Brazil and England

J. Meira^{*1}, S. Anjos², A. Eves³

¹UCF Rosen College of Hospitality Management, USA, ²UNIVALI, Brazil, ³University of Surrey, UK

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Image change over the course of vacation: Before, during, and after

A. Tasci^{*1}, N. Hua¹, S. Moreno-Gil²

¹University Central Florida, USA, ²University Las Palmas de Gran Canaria, Spain

MONDAY, DECEMBER 16, 2019: Marketing, branding and reputation management - 14:00-15:10
14:25-14:45

Impact of employees on food waste generation in hotels

B. Okumus^{*1}, I. Giritlioglu¹

¹UCF Rosen College and Hospitality Mgt., USA, ²Gaziantep University, School of Tourism and Hospitality, Turkey

SATURDAY, DECEMBER 14, 2019: Refreshment Break & Poster Session 1 - 16:40-17:40

Impact of movie exposure on international tourism demand

C. Lim^{*1}, F. Chan², J. Zhang³

¹University of Macau, China, ²Curtin University, Australia, ³University of Macau, China

SUNDAY, DECEMBER 15, 2019: Corporate Management - 16:00-17:10
16:50-17:10

Importance of commercial hospitality to male community

O. Fagbolu, B. Ogunlana^{*}

Kwara State University, Nigeria

SATURDAY, DECEMBER 14, 2019: Product, Service, and Experiential Innovation - 15:05-16:40
15:05-15:25

Industry professionals' perceptions of hiring military veterans for the hospitality industry

L. Cobos^{*1}, W. Ingram¹

¹Missouri State University, USA, ²University of North Texas at Dallas, USA

SATURDAY, DECEMBER 14, 2019: Refreshment Break & Poster Session 1 - 16:40-17:40

Influence dissemination of intangible cultural heritage through on-site experience and social media

Y. Fu^{1,2}

¹Guangdong University of Finance and Economics, China, ²Hainan University-Arizona State University Joint Internat

SUNDAY, DECEMBER 15, 2019: Refreshment Break & Poster Session 2 - 15:00-16:00

Influence of service environment and service quality on guest satisfaction and behavioral intentions in Full Service I

M. Mohamed^{*}, A-E. Sobaih

Helwan University, Egypt

MONDAY, DECEMBER 16, 2019: Economics and Forecasting - 16:10-17:20
16:35-16:55

Intention to use social media for outbound leisure travel: A SEM analysis of the Technology Acceptance Model (TAM)
S. Singh^{*1}, P. Srivastava², S. Dixit³

¹Amity University Uttar Pradesh, Lucknow, India, ²Jaipuria Institute of Management, Lucknow, India, ³Amity Unive
SATURDAY, DECEMBER 14, 2019: Social Media, Emerging Technologies and e-tourism - 12:00-13:10
12:25-12:45

Investigating the effects and implications of human resource policies against "off-the-clock" cannabis use in Colora
S. Richardson^{*1}, A.J. Templeton²

¹University of Central Florida, USA, ²Southern Utah University, USA
MONDAY, DECEMBER 16, 2019: Contemporary Topics - 14:00-15:10
14:50-15:10

Investigating visitors' judgements for developing coastal tourism products: evidence for making solid decisions

G. Oikonomou^{*3}, A. Menegaki¹, D. Kallioras²

¹Agricultural University of Athens, Greece, ²University of Thessaly, Greece, ³Business Support Center Region of Ce
SUNDAY, DECEMBER 15, 2019: Marketing, Branding, and Reputation Management - 09:55-11:05
09:55-10:15

It makes me feel vulnerable! The impact of public disclosure on online complaining behaviour

S. Dyussebayeva^{*}, G. Viglia, M. Nieto-Garcia

University of Portsmouth, UK

MONDAY, DECEMBER 16, 2019: Consumer Behavior, Collaborative Consumption, Co-Creation, Decision Making, Experience - 10:45-12:00
10:45-11:10

Keep it smart and sustainable - a bibliometric analysis

S. Avelar

University of the Azores, Portugal

SATURDAY, DECEMBER 14, 2019: Contemporary Topics - 15:05-16:40
15:55-16:15

Last chance tourism through a value-belief-norm model

T. Denley^{*1}, K.M. Woosnam^{1,2}, M.A. Ribeiro², C. Hehir²

¹University of Georgia, USA, ²University of Surrey, UK

MONDAY, DECEMBER 16, 2019: Tourism Economics - 16:10-17:20
16:35-16:55

Leveraging tourism as a driver for spiritual self-realization: Case of mystic India

N. Singh¹, P. Singh², D. Singh^{*3}

¹Clarion University of Pennsylvania, USA, ²Indian Institute of Information Technology, India, ³University of Central

SATURDAY, DECEMBER 14, 2019: Refreshment Break & Poster Session 1 - 16:40-17:40

Local perception and attitudes towards the development of boutique hotels: the case of Palma de Mallorca

S. Miró, M.J. Moreno^{*}, L. Melo

Escuela Universitaria de Turismo Felipe Moreno, Spain

SUNDAY, DECEMBER 15, 2019: Policy, Planning and Governance - 11:35-12:45
12:25-12:45

Management and tourist planning of a UNESCO World Heritage: online travel review study

T. Pereira^{*1}, A. Leoti¹, F. Cunha Lima¹

¹Universidade do Vale do Itajaí, Brazil, ²Universidade da Região de Joinville, Brazil

MONDAY, DECEMBER 16, 2019: Policy, Planning and Governance - 10:45-12:00
11:15-11:35

Maternity benefit and organization attractiveness - Implication for talents acquisition and retention

E. Ma^{*}, L. Wu, W. Yang

University of Massachusetts Amherst, USA

MONDAY, DECEMBER 16, 2019: Refreshment Break & Poster Session 3 - 15:10-16:10

Measuring the competitive position of a stopover destination in four international markets

S. Pike^{*1}, F. Kotsi¹

¹Queensland University of Technology, Australia, ²Zayed University, United Arab Emirates

SATURDAY, DECEMBER 14, 2019: Marketing, Branding, and Reputation Management - 15:05-16:40
15:05-15:25

Measuring tourism community disaster resilience in Florida

E. Yang^{*}, J. Kim

University of Florida, USA

SUNDAY, DECEMBER 15, 2019: Crisis Management, Risk Management, Safety & Security - 16:00-17:10
16:25-16:45

Mechanism of user replying behaviour in travel online community

B. Liu¹, H. Jiang^{*1}, F. Meng²

¹*Sun Yat-Sen University, China*, ²*University of South Carolina, China*

SATURDAY, DECEMBER 14, 2019: Social Media, Emerging Technologies and e-tourism - 12:00-13:10
12:50-13:10

Millennials' motivations and their willingness to pay for sustainability and technology along the value chain of resta

R. Iniguez Apolo*, S. Villon Perero, T. Aguirre Suarez, B. Vasquez Farfan

Universidad Estatal Peninsula de Santa Elena, Ecuador

SUNDAY, DECEMBER 15, 2019: Refreshment Break & Poster Session 2 - 15:00-16:00

Mobile applications supporting student physical activity

J. Berbeka*, K. Borodako, M. Lapczynski, M. Rudnicki

Cracow University of Economics, Poland

SUNDAY, DECEMBER 15, 2019: Consumer Behavior, Collaborative Consumption, Co-Creation, Decision - 11:35-12:45
12:00-12:20

Modeling resilience of tourism destinations: Integrating the adaptive theory with reality

P. Bangwayo-Skeete*, R. Skeete

University of North Carolina Wilmington, USA

SUNDAY, DECEMBER 15, 2019: Competitiveness, Sustainability and CSR - 11:35-12:45
12:25-12:45

Modelling changes in recreational fishing destination choice due to the BP/Deepwater Horizon oil spill: A networks :

F. Bahja*, S. Alvarez, J. Baggio

University of Central Florida, USA

SUNDAY, DECEMBER 15, 2019: Contemporary Topics - 16:00-17:10
16:00-16:20

Modelling international tourism demand in the United States: An Augmented Gravity Approach

D. Aratuo

George Mason University, USA

SATURDAY, DECEMBER 14, 2019: Tourism Economics - 15:05-16:40
16:20-16:40

Mundane mobilities: The nature and dynamics of dirty tourism

A.D. Pressey*, L.C. Harris

University of Birmingham, UK

MONDAY, DECEMBER 16, 2019: Consumer Behavior, Collaborative Consumption, Co-Creation, Decision Making, Experience - 10:45-12:00
11:15-11:35

Observing food safety infractions in restaurants: See something, say something

K. Harris*, R. DiPietro, D. Jin

Florida State University, USA

SATURDAY, DECEMBER 14, 2019: Consumer Behavior, Collaborative Consumption, Co-Creation, Decision Making, Experience - 12:00-13:10
12:00-12:20

Online destination experiences and credibility: A study from the brand perspective on official online platforms

J. Jiménez-Barreto^{*1}, N. Rubio¹, S. Campo¹, S. Molinillo²

¹*Autonomous University of Madrid, Spain*, ²*University of Malaga, Spain*

SATURDAY, DECEMBER 14, 2019: Refreshment Break & Poster Session 1 - 16:40-17:40

Online travel agencies and their role in the tourism industry

G. Garcia*, A.P. Sohn

Universidade do Vale do Itajaí - Univali, Brazil

SUNDAY, DECEMBER 15, 2019: Tourism Economics/Supply-Chain Management - 11:35-12:45
11:35-11:55

Organizing for fandom

R. Macy*, R. Eddy

University of Central Florida, USA

MONDAY, DECEMBER 16, 2019: Refreshment Break & Poster Session 3 - 15:10-16:10

Outcome mapping methodology applied to community tourism product development

M. McLeod*, M. McNaughton

University of the West Indies, Bahamas

SATURDAY, DECEMBER 14, 2019: Product, Service, and Experiential Innovation - 15:05-16:40
15:55-16:15

Pay what you think fair (PWYTF): Framing with manifested fairness perception in participative pricing in hospitality
A. Adhikari

Indian Institute of Management Kozhikode, India

SUNDAY, DECEMBER 15, 2019: Tourism Economics/Supply-Chain Management - 11:35-12:45
11:35-11:55

Perceptions of a heritage site and animosity

V. Abraham^{*1}, Y. Poria²

¹*Sapir Academic College, Israel*, ²*Ben-Gurion University, Israel*

SUNDAY, DECEMBER 15, 2019: Contemporary Topics - 09:55-11:05
10:45-11:05

Predicting social capital in multidimensional service quality theory: A Facebook perspective

M.A. Hossain^{*1}, M. Kim², N. Jahan³

¹*Hajee Mohammad Danesh Science and Technology University, Bangladesh*, ²*Chonbuk National University, Republic*

SUNDAY, DECEMBER 15, 2019: Social Media, Emerging Technologies and e-tourism - 11:35-12:45
12:25-12:45

Predictors of tourists' psychological conditions and behaviour intention after a natural disaster: Experiences of the

L. Cheng, X. Zhang^{*}

Sichuan University, China

SUNDAY, DECEMBER 15, 2019: Crisis Management, Risk Management, Safety & Security - 16:00-17:10
16:00-16:20

Preliminary study on the relationships among festival volunteers' motivation, satisfaction, loyalty, and psychological

M.R. Kim^{*1}, S.J. Lee², J.C. Jang³, L. Niehm⁴

¹*Michigan State University, USA*, ²*Iowa State University, USA*, ³*Kansas State University, USA*, ⁴*Iowa State University*

SUNDAY, DECEMBER 15, 2019: Crisis Management, Risk Management, Safety & Security - 16:00-17:10
11:40-12:00

Presence and absence: Understanding the tourist gaze at literary attractions

C. Harfield

University of Birmingham, UK

MONDAY, DECEMBER 16, 2019: Consumer Behavior, Collaborative Consumption, Co-Creation, Decision Making, Experience - 10:45-12:00
11:40-12:00

Public-private partnerships for disaster resilience: EOCs' perspectives on tourism roles

I. Cahyanto^{*1}, B. Liu-Lastres²

¹*University of Louisiana at Lafayette, USA*, ²*Indiana University-Purdue University Indianapolis, USA*

SUNDAY, DECEMBER 15, 2019: Crisis Management, Risk Management, Safety & Security - 09:55-11:05
09:55-10:15

Qualitative identification of associated words with the respective online service ratings

D. GuhaRoy^{*1}, S. Bhattacharya²

¹*Goa Institute of Management, India*, ²*IIT Kharagpur, India*

SUNDAY, DECEMBER 15, 2019: Service Excellence and Service Quality - 09:55-11:05
09:55-10:15

Refugee entrepreneurship in tourism for integration

G. Cetin¹, L. Altinay¹, A. Farmaki^{*1}

¹*Istanbul University, Turkey*, ²*Oxford Brookes University, UK*, ³*Cyprus University of Technology, Cyprus*

MONDAY, DECEMBER 16, 2019: Policy, Planning and Governance - 14:00-15:10
14:00-14:20

Relative importance of hotel guest satisfaction predictors by hotel class

Y. Koh^{*1}, M. Lee¹, M. Kim¹

¹*University of Houston, USA*, ²*Michigan State University, USA*

SATURDAY, DECEMBER 14, 2019: Business Analytics, Models, and Operational Practice - 12:00-13:10
12:25-12:45

Research methods analyzing social media data in the tourism and hospitality field

L. Su^{*}, S. Stepchenkova

University of Florida, USA

SUNDAY, DECEMBER 15, 2019: Social Media, Emerging Technologies and e-tourism - 16:00-17:10
16:50-17:10

Residents perceptions of the initiatives of Corporate Social Responsibility in accommodation establishments

T. Pereira^{*}, S. Anjos

Universidade do Vale do Itajaí (UNIVALI), Brazil

MONDAY, DECEMBER 16, 2019: Competitiveness, Sustainability and CSR - 10:45-12:00
10:45-11:10

Retail hospitality in the city of São Paulo

A. Margutti, R. Marques*

Universidade Anhembi Morumbi, Brazil

SUNDAY, DECEMBER 15, 2019: Refreshment Break & Poster Session 2 - 15:00-16:00

Revisiting females' perception of risk and its consequences on tourism behavior

V. Abraham*¹, O. Orly², R. Mizrahi²

¹*Sapir Academic College, Israel*, ²*Ben-Gurion University, Israel*

MONDAY, DECEMBER 16, 2019: Consumer Behavior, Collaborative Consumption, Co-creation, Decision Making, Experience and Satisfaction - 14:00-14:50-15:10

Revitalization of traditional villages through rural tourism : exploring the typical beautiful villages in China

C. Gao*, L. Cheng

Sichuan University, China

MONDAY, DECEMBER 16, 2019: Refreshment Break & Poster Session 3 - 15:10-16:10

Seniors' preferences for trading technology for touch to maximize well-being and life satisfaction: A review of the I

E. Emerson

Rollins College, USA

SUNDAY, DECEMBER 15, 2019: Innovation, Creativity and Change Management - 09:55-11:05
10:45-11:05

Shift-share analysis of regional economic and developmental impact of tourism in Petra

I. Abuamoud*¹, Z. AlRawadieh¹, S. AlFarajat²

¹*The University of Jordan, Jordan*, ²*Petra Development and Tourism Region Authority (PDTRA), Jordan*

SATURDAY, DECEMBER 14, 2019: Tourism Economics - 15:05-16:40
15:05-15:25

Small island tourism development and residents' subjective well-being: A focused comparison case study approach

R. Croes*, M. Rivera, K. Semrad

University of Central Florida, USA

MONDAY, DECEMBER 16, 2019: Policy, Planning and Governance - 10:45-12:00
11:40-12:00

Strategic direction for rural tourism planning and development: A case study in the southeast U.S.A.

A. Sebbby

Western Carolina University, USA

SUNDAY, DECEMBER 15, 2019: Policy, Planning, and Governance - 16:00-17:10
16:00-16:20

Study on hospitality on board of Brazilian aircraft

A. Kaperaviczus, A. Cavenaghi, E. Wada*

Universidade Anhembi Morumbi, Brazil

MONDAY, DECEMBER 16, 2019: Tourism Economics - 10:45-12:00
11:15-11:35

Surveying restaurant employees: An analysis of three data collection methods

M. Alcorn*¹, K.R. Roberts¹

¹*Texas Tech University, USA*, ²*Kansas State University, USA*

SATURDAY, DECEMBER 14, 2019: Refreshment Break & Poster Session 1 - 16:40-17:40

Sustainable practices in the hotel industry: A systematic literature review

A. Acampora, R. Merli*, M. Preziosi

Roma Tre University, Italy

SUNDAY, DECEMBER 15, 2019: Competitiveness, Sustainability and CSR - 11:35-12:45
12:00-12:20

Sustainably driven: A look at the facilitators and inhibitors electrifying drive tourism within the United States Natio

A. Templeton*¹, A. Fyall², J. Fjelstul², A.D.A. Tasci²

¹*Southern Utah University, USA*, ²*University of Central Florida, USA*

SATURDAY, DECEMBER 14, 2019: Competitiveness, Sustainability and Corporate Social Responsibility - 12:00-13:10
12:00-12:20

TBC

D. Young

Visit Florida, USA

MONDAY, DECEMBER 16, 2019: [K05] Dana Young, Visit Florida, USA - 09:15-10:15
09:15-10:15

The biggest challenge facing the leisure industry over the next five years

W. Bogumil

SeaWorld Entertainment Inc., USA

SATURDAY, DECEMBER 14, 2019: [K01] Walter Bogumil, Chief Strategic Officer, SeaWorld Entertainment, Inc. - 09:30-10:20
09:30-10:20

The boutique hotel industry in Guayaquil - Ecuador, analysis of Hotel del Parque's sales and marketing strategies for

A. Ycaza*, V. Baquerizo

Ecotec University, Ecuador

SUNDAY, DECEMBER 15, 2019: Contemporary Topics - 16:00-17:10
16:50-17:10

The characteristics of hospitality in Brazil

R. Marques, E. Wada*, C. Alves

Universidade Anhembi Morumbi, Brazil

MONDAY, DECEMBER 16, 2019: Consumer Behavior, Collaborative Consumption, Co-creation, Decision Making, Experience and Satisfaction - 14:00-14:25-14:45

The characteristics of tourists and their influence in tourists' choice of attractions

H. Padrón Ávila*, R. Hernández Martín

Universidad de La Laguna, Spain

SUNDAY, DECEMBER 15, 2019: Consumer Behavior, Collaborative Consumption, Co-Creation, Decision Making, Experience - 16:00-17:10
16:25-16:45

The contribution of small accommodation enterprises to sustainable waste management

E. Agyeiwaah

Macau University of Science and Technology Avenida Wai Long, China

SUNDAY, DECEMBER 15, 2019: Competitiveness, Sustainability and CSR - 16:00-17:10
16:50-17:10

The development of spiritual tourism - A case of Shanti Gaia guest house

S. Becker*, G. Garcia

Universidade do Vale do Itajaí - Univali, Brazil

MONDAY, DECEMBER 16, 2019: Consumer Behavior, Collaborative Consumption, Co-creation, Decision Making, Experience and Satisfaction - 14:00-14:00-14:20

The effect of immersive extended reality environment on destination appeal

P. Tuominen*¹, X. Lub², D. Han²

¹*Haaga-helia University of Applied Sciences, Finland*, ²*Breda University of Applied Sciences, The Netherlands*

SATURDAY, DECEMBER 14, 2019: Marketing, Branding, and Reputation Management - 15:05-16:40
15:30-15:50

The effect of spatial distance on visitors' motivation to travel, perception of safety, and impact on the community:

A. Huang*¹, K. Aleshinloye¹, X. Fu¹, K. Woosnam²

¹*University of Central Florida, USA*, ²*Texas A&M University, USA*

MONDAY, DECEMBER 16, 2019: Consumer Behavior, collaborative consumption, co-creation, decision making, experience and satisfaction - 16:10-16:10-16:30

The effect of using business simulation in Hospitality education

Y. Kageyama*, A. Barreda

Missouri State University, USA

MONDAY, DECEMBER 16, 2019: Refreshment Break & Poster Session 3 - 15:10-16:10

The effects of extreme weather events on the tourism industry in Florida: A spatio-temporal analysis of longitudinal

A. Huang*, M. Medeiros

UCF Rosen College of Hospitality Management, USA

SUNDAY, DECEMBER 15, 2019: Refreshment Break & Poster Session 2 - 15:00-16:00

The examination of the effects of priority queues and the evaluation of consumers who are willing or able to pay

M. Wotherspoon

University of Central Florida, USA

MONDAY, DECEMBER 16, 2019: Refreshment Break & Poster Session 3 - 15:10-16:10

The Florida everglades and sustainable global tourism in UNESCO world heritage sites

K. Taylor, R. Kelly, E. Emerson*

Rollins College, USA

SATURDAY, DECEMBER 14, 2019: Competitiveness, Sustainability and Corporate Social Responsibility - 15:05-16:40
15:30-15:50

The hospitable characteristics of the hosts of the Tourist Information Centers in the city of São Paulo

R. Silva, R. Marques*

Universidade Anhembi Morumbi, Brazil

MONDAY, DECEMBER 16, 2019: Refreshment Break & Poster Session 3 - 15:10-16:10

The impact of crises on professional attitudes of prospective tour guides

D. Yetgin*¹, A. Yilmaz¹, G. Ciftci²

¹Anadolu University, Turkey, ²Trakya University, Turkey

SATURDAY, DECEMBER 14, 2019: Human Resources and Strategic Leadership Development - 12:00-13:10
12:25-12:45

The impact of Innovation on performance and competitiveness of small tourism companies

A. Zuñiga-Collazos*, M. Castillo-Palcio, L.M. Padilla-Delgado

Universidad de San Buenaventura Cali, Colombia

SUNDAY, DECEMBER 15, 2019: Innovation, Creativity and Change Management - 09:55-11:05
09:55-10:15

The impact of language proficiency on service satisfaction

W. Messner

University of South Carolina, USA

SUNDAY, DECEMBER 15, 2019: Service Excellence and Service Quality - 09:55-11:05
10:45-11:05

The impact of price on hotel reviews

G. Abrate*¹, R. Pera², S. Quinton³

¹University of Piemonte Orientale, Italy, ²University of Turin, Italy, ³Oxford Brookes University, UK

SUNDAY, DECEMBER 15, 2019: Business Analytics, Models and Operational Practice - 09:55-11:05
09:55-10:15

The impact of "seen" sustainability efforts on Hotel Green brand image

L. Lambrano*, C. Mejia

University of Central Florida, USA

SATURDAY, DECEMBER 14, 2019: Competitiveness, Sustainability and Corporate Social Responsibility - 15:05-16:40
16:20-16:40

The influence of terrorist attacks on tourism to Paris

C. Petersen, K. Bremser*

Pforzheim University, Germany

MONDAY, DECEMBER 16, 2019: Refreshment Break & Poster Session 3 - 15:10-16:10

The process of collecting as a distinct tourist behaviour

S. Magrizos*¹, I. Kostopoulos¹

¹University of Birmingham, UK, ²Liverpool John Moore University, UK

SUNDAY, DECEMBER 15, 2019: Consumer Behavior, Collaborative Consumption, Co-Creation, Decision - 11:35-12:45
12:25-12:45

The relationship of travel management companies of Brazil with global networks of business cooperation

D. Braga^{1,2}

¹Universidade de São Paulo - USP, Brazil, ²CNPq, Brazil

SUNDAY, DECEMBER 15, 2019: Refreshment Break & Poster Session 2 - 15:00-16:00

The role of CVB websites after the crises

S. Bae

East Carolina University, USA

MONDAY, DECEMBER 16, 2019: Refreshment Break & Poster Session 3 - 15:10-16:10

The role of different types of scandals and intensity on hotel customers' booking intentions

J.Y. Park*, L. Lenglet

University of Central Florida, USA

SUNDAY, DECEMBER 15, 2019: Refreshment Break & Poster Session 2 - 15:00-16:00

The role of emotional intelligence on the relationship between customer misbehavior and job stress

E. Kwon*¹, J. Lee², S. Song³

¹Lamar University, USA, ²Macao University of Science and Technology, Macao, ³Kyung Hee University, Republic of Korea

SUNDAY, DECEMBER 15, 2019: Human Resources & Strategic Leadership Development - 11:35-12:45
12:25-12:45

The success of crowdfunding: Seeking for influential factors for a successful campaign

J.Y. Park^{*1}, G. Lelo de Larrea¹, K. Park², M. Altin¹

¹University of Central Florida, USA, ²North Dakota State University, USA

MONDAY, DECEMBER 16, 2019: Contemporary Topics - 14:00-15:10

The tourism perspective of Israelis' information searching behavior

D. Bouhnik^{*1,2}, K. Maman¹, I. Zarruk¹

¹Bar Ilan University, Israel, ²Jerusalem College of Technology, Israel

SATURDAY, DECEMBER 14, 2019: Refreshment Break & Poster Session 1 - 16:40-17:40

The tourist experience mirrored in social networks: A text mining approach

S.M.C. Loureiro

Instituto Universitário de Lisboa (ISCTE-IUL) and BRU-IUL, Portugal

SATURDAY, DECEMBER 14, 2019: Social Media, Emerging Technologies and e-tourism - 12:00-13:10

12:00-12:20

The viability of the pop-up business model for firm creation: What is the food and beverage industry telling us?

K. Hight^{*1,2}, F. Okumus², J.Y. Park², D. Bufquin², L. Altinay³

¹Georgia State University, USA, ²University of Central Florida, USA, ³Oxford Brookes University, UK

SUNDAY, DECEMBER 15, 2019: Business Analytics, Models and Operational Practice - 09:55-11:05

10:20-10:40

Themed rooms in business hotels: Targeting staycation guests in Singapore

Z. Liu^{*1}, B. Luey²

¹Singapore Institute of Technology, Singapore, ²JLL Singapore, Singapore

SATURDAY, DECEMBER 14, 2019: Product, Service, and Experiential Innovation - 15:05-16:40

16:20-16:40

Theoretical considerations on typology and models of consumption of cruise travellers and their economic contribution

J. Kizielewicz

Gdynia Maritime University, Poland

MONDAY, DECEMBER 16, 2019: Consumer Behavior, Collaborative Consumption, Co-Creation, Decision Making, Experience - 10:45-12:00

11:15-11:35

Tourism and hospitality in Brazil: A research proposal on educational competences

C. Stefanini^{*}, M. Rejowski, R. Ferro

Universidade Anhembi Morumbi, Brazil

SATURDAY, DECEMBER 14, 2019: Education and Training - 15:05-16:40

15:55-16:15

Tourism as a strategy for economic development in the city of Pigeon Forge, Tennessee

M. Bonimy

Belmont University Fellow in Hospitality and Tourism Management, USA

MONDAY, DECEMBER 16, 2019: Competitiveness, Sustainability and Corporate Social Responsibility - 14:00-15:10

14:00-14:20

Tourism development and perceived quality of life in transition: a residents' perspective

R. Croes^{*}, V. Shapoval, M. Rivera, M. Bak, P. Zientara et al

Rosen UCF, USA

SUNDAY, DECEMBER 15, 2019: Contemporary Topics - 09:55-11:05

10:20-10:40

Tourism development planning of the Zamora county in the Southern Amazon of Ecuador

M. G. Suasnavas Rodriguez

Universidad Técnica Particular de Loja, Ecuador

MONDAY, DECEMBER 16, 2019: Refreshment Break & Poster Session 3 - 15:10-16:10

Tourism governance shaping economic leakages in the Lebanese lodging industry

R. Der Wartanian^{*}, A. Abou Fayad, A. Azouri et al

Lebanese University, Lebanon

SUNDAY, DECEMBER 15, 2019: Policy, Planning and Governance - 11:35-12:45

12:00-12:20

Tourism management relationship with education in tourism and its implications in the labour market

M. Carreño^{*1}, D. Celis¹

¹CENP Tourism School, Spain, ²Univ. Las Palmas de Gran Canaria, Spain

SATURDAY, DECEMBER 14, 2019: Education and Training - 15:05-16:40

16:20-16:40

Tourism operator's liability for jellyfish stings

L. Crowley-Cyr^{*1}, L. Gershwin²

¹University of Southern Queensland, Australia, ²Australian Marine Stinger Advisory Services Pty. Ltd., Australia

SUNDAY, DECEMBER 15, 2019: Policy, Planning, and Governance - 16:00-17:10
16:25-16:45

Tourist shopping: Key determinants of willingness to pay

P. Boonchai^{*}, S. Ghuangpeng, T. Lakornsri

Maharakham University, Thailand

SATURDAY, DECEMBER 14, 2019: Consumer Behavior, Collaborative Consumption, Co-Creation, Decision Making, Experience - 12:00-13:10
12:25-12:45

Towards an understanding of decision-making in choosing a study abroad program

H. Zhang^{*}, H. Gibson

University of Florida, USA

SUNDAY, DECEMBER 15, 2019: Refreshment Break & Poster Session 2 - 15:00-16:00

Transformative experiences

M.V. Godovykh^{*}, A.D.A. Tasci

University of Central Florida, USA

MONDAY, DECEMBER 16, 2019: Emerging Research Methods and Methodologies - 10:45-12:00
11:40-12:00

Travel vlogs and destination image formation

X. Zhang, J. Hu, X. Hao^{*}

Sun Yat-sen University, China

SATURDAY, DECEMBER 14, 2019: Refreshment Break & Poster Session 1 - 16:40-17:40

Understanding employees' motivations towards self-directed learning

Z. Liu^{*}, H. Koo

Singapore Institute of Technology, Singapore

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Understanding success of ethnic entrepreneurs: A grounded theory approach

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Anadolu University, Turkey

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Understanding the blockchain technology adoption in the hotel industry

S. Bae

East Carolina University, USA

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Understanding the role of service quality in building relationship share for hotels: Examining the mediating role of c

R. Baniya^{*}, B. Thapa

University of Florida, USA

SUNDAY, DECEMBER 15, 2019: Service Excellence and Service Quality - 09:55-11:05
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Using advanced machine learning models to determine supply-side and demand-side hotel pricing decisions

A. Israeli^{*}, R. Razavi

Kent State University, USA

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Using the Repertory Test with laddering analysis for destination positioning development based on personal values

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Visualization of tourists' gaze areas using processing top and front spatial images

A. Takahashi^{*}, S. Kawase, M. Arikawa

Akita University, Japan

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Warmth, competence, and morality: Its effects on frontline restaurant employees' job burnout and turnover intent
D. Bufquin

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What does ready look like? Senior Living: Where Healthcare and Hospitality Merge

S. Robinson

Brookdale Senior Living, USA

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What induced the nostalgia emotion of tourist in historic area

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What influences hotel guests' intentions to engage in green programs at hotels

M. Sayed

Helwan University, Egypt

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When do environmental causes matter? The relationships between ecological consciousness, green practices, and BI
C.A. Alves, C.J. Stefanini*, L. Aureliano Da Silva DA SILVA, B.K. Costa

Universidade Anhembí Morumbi, Brazil

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When the whole is greater than the sum of its parts: Hotel Marketing Consortia as a winning strategy

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Whether control group designs affect tourism experiment outcomes? Two studies in China

K. Lai, H. Liu*

Sun Yat-sen University, China

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Why do I visit this restaurant over and over? The role of satiation and inertia on the relationship between service quality

K. Lanfranco, J.Y. Park*

University of Central Florida, USA

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I. Gewinner

University of Luxembourg, Luxembourg

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Yesterday's tourism for tomorrow's market: An investigation of culture and heritage in The Bahamas

S. Rolle

University of the West Indies, Bahamas

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Youth sports travel and flow-on tourism: Comparing Florida and Indiana

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MONDAY, DECEMBER 16, 2019: Sport Tourism, Festivals & Events, Lodging and MICE Marketing and Management - 10:45-12:00
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Programme Titles Presenters Topics

Corporate Management

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16:00-16:20 **[O1.14]**

Aviation industry environmental responsibility at the airport using A-CDM

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Aviation industry environmental responsibility at the airport using A-CDM

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Abstract

The environmental impact of aviation is an important issue. It poses a considerable challenge to the industry, whose participants have a critical responsibility. The International Civil Aviation Organization (ICAO) and the International Air Transport Association (IATA) have adopted targets to mitigate emissions from air transportation to deal with the global problem of climate change. This includes operations at airports. The purpose of this paper is: (1) to investigate aircraft emissions; (2) to study the methods of reduction of fuel emissions from airlines and airport operational procedures; and (3) to suggest how the airline and airport operations procedures could be improved.

Keywords: Aviation industry, A-CDM, Environmental responsibility, SEM

1. Introduction

Okwie et al. (2016) note the significance of the aviation industry for its customers and economic growth. The rapid and safe movement of people and products has enhanced the quality of life across the globe. The deregulation of the airline industry has had a dramatic effect on its development. Air traffic congestion is an important issue at international airports, and is the result of an increase in the number of air passengers. Air quality, climate change, annoyance caused by

aircraft noise, and emissions of carbon dioxide, nitrogen oxide and aerosols are all matters of concern. According to the FAA's Aviation Environment Design Tool (AEDT), aircraft fuel burn on a flight-by-flight basis is used to modify AEDT output four in the analysis carried out using the Community Multiscale Air Quality (CMAQ) modelling system (Byun et al., 2006; Wolfe et al., 2014). A rapid dispersion code (RDC) can be applied to calculate emissions at each phase of flight. The airport terminal location, taxiways and runways have to be considered according to the aeronautical information publication (AIP) provided. Air quality, and in particular particulate matter (PM_{2.5}) emissions, can be established using the Community Multiscale Air Quality (CMAQ) model.

Aviation decision makers face complex problems that involve uncertain situations. According to Classen and Rudolph (2015) and Classen et al. (2016) a holistic approach is needed to improve modern airport management. The application of airport-collaborative decision making (A-CDM) can be applied to airline, airport and air traffic service management. Its principles and conceptual framework demand the utilisation of all stakeholders' resources to achieve higher quality service. The environmental effects of emissions need to be addressed, but complex aviation problems involving uncertain and challenging situations require competent and comprehensive decision-making using A-CDM. This is an important and highly necessary process. Airport-collaborative decision making brings together airlines and airports to share timely and accurate information to facilitate better decision making, plan operations and improve air traffic management (ATM). The theory and methods of A-CDM together with information technology and process innovation will lessen the industry's environmental impact.

The aviation industry plays a significant role both directly and indirectly in economic change and in the environment. It contributes to customers' quality of life by enabling their rapid and safe movement across the globe (Okwie et al., 2016). Over the years, the industry has grown rapidly, and it continues to do so. The impact of aviation is affected by airline operations, airport operations and ATM, and these are in part determined by facilities and airspace capacity. Increasing capacity and efficiency are the industry's main goals. The supply and demand for airport facilities and airspace capacity has to be balanced. Airport facilities such as terminals, aircraft parking areas, runways, taxiways and airspace capacity have to be improved to support airline services.

The introduction of A-CDM aims to improve operational efficiency by integrating the resources and data from airline operations and ATM with innovative processes to improve operational efficiency. This will lead to environmental improvement.

2. Literature review

2.1 Airport-Collaborative Decision Making (A-CDM)

Airport-collaborative decision making (A-CDM) is a decision-making process applied to aviation operations at the airport. This is a method of collaboration and sharing information between stakeholders. The main objective is to generate a common situational awareness that will

foster improved decision-making. These exchanges of information, in turn, help to optimise the use of aerodrome resources, reduce arrival and departure delays, and improve predictability during regular and irregular operations. The decision-making process is facilitated by the sharing of accurate and timely operational information by means of a common toolset, and by the application of agreed-upon processes and procedures. Airport-collaborative decision making allows all stakeholders to optimise their operations and decisions in a collaborative environment, in light of their preferences, known constraints and forecasted situations.

Air traffic flow management (ATFM) and A-CDM are requirements for air navigation service providers (ANSPs) under the ICAO Annex 11 to the Convention on Civil Aviation for member states, enabling more efficient, effective ATM operations. Airport-collaborative decision making (A-CDM) assists ANSPs in achieving this, and is therefore an important component of optimising air traffic flow.

Airport collaborative decision-making (A-CDM) can improve the efficiency, capacity and environmental performance of airport operations by optimising the use of resources and improving the predictability of events. A-CDM may also enhance the planning and management of en-route operations. The procedure is based on real-time information sharing between airport operators, aircraft operators, ground handlers, and air traffic control (ATC), and involves the implementation of a set of operational procedures and automated processes.

CANSO's guidelines on A-CDM key performance measures assist ANSPs and states in establishing a programme that meets the expectations of all stakeholders and that is in accordance with international standards (ICAO Doc 9971). It also provides ANSPs with recommendations for monitoring performance and maximising benefits.

The effective evaluation of an A-CDM programme sets out a recommended performance framework and assists in developing measurement criteria (also called key performance objectives), and breaking them down into key performance indicators (KPIs). The guidance is essential for those who have established an A-CDM programme or are developing the tools to monitor effectively a new one.

The purpose of A-CDM is to improve an airport operational standards; these have an impact on the airline turnaround process during the pre-flight phase. It also has an impact on aircraft take-off and approach for landing phases. The programme is concerned with airline, airport and ATC management. Consequently, A-CDM aims to improve air traffic flow and capacity management by reducing taxi times and turnaround times, which translates into, for instance, economic benefits and environmentally friendly conditions. However, due to the diverse composition of actors, the assessment of turnaround performance relies on a A-CDM system that includes, inter alia, ground handlers, airlines, the airport management, and air navigation service providers.

An important practical aspect of A-CDM is its capacity to improve airline, airport, and ATM. A key factor that enhances the activities of participants, such as airport slot coordinators, is its capacity to envision how many additional slots can be approved. Airline operators can establish how many flights can be monitored with the schedule based on passenger demand, and ATC units

can develop suitable techniques to coordinate airport and runway capacity together with surrounding airspace with the air navigation services. At the same time, the ground handling equipment unit will utilise its resources adequately, so that additional flights can be conducted with fewer resources.

2.2 Principles of A-CDM and its application to the aviation industry

The principle of A-CDM is to apply agreed cross-collaborative processes, including communication protocols, training, procedures, tools, regular meetings, and information sharing, which moves all operations from stovepipe decision-making into a collaborative management process that improves overall system performance and benefits individual stakeholders (CANSO, 2016).

A-CDM should support all participants with accurate and up-to-date information. The operational procedures, automatic processes, and user-friendly programmes should be adopted. A-CDM is designed to improve aviation operational efficiency, for example by reducing airport delays, improving the predictability of events during the progress of flights, and optimising the utilisation of resources (Capgemini, 2010). According to Ghosh et al., one of the key factors is the aircraft, which is the connecting element between aviation industry stakeholders such as airlines, airports, air navigation service providers (ANSPs), and manufacturers (Ghosh et al., 2016).

Participants involved in airport-collaborative decision making (A-CDM)

Airport business unit

Flight delays at a congested airport not only affects loss of reputation and the image that is created in the mind of unsatisfied passengers; they also affect the airport's environment, because of the pollution from aircraft engines, noise, and other pollution that is generated as a consequence around the airport. Improper airport slot coordination for aircraft manoeuvres in the airport or take-off and landing phases lead to airport congestion and flights delay and that in turn affects the airport's environment. It also affects the performance dimension; irregular and inconsistent coordination leads to reduced operational efficiency and asymmetrical capacity utilisation and allocation of flights, all of which will affect airport pollution.

Airline business unit

Aircraft need to consume fuel at all phases of flight, including during the pre-flight phase, when the aircraft is on the ground and starting up its engines, and so this damages the environment. Without proper A-CDM arrangement procedures, flight delays will increase fuel consumption, and additional allocation of taxiways and runways for take-off aircraft will be required.

Air Traffic Control unit

A-CDM could help Air Traffic Control (ATC) to increase its efficiency. It will have an increased ability to instruct aircraft according to the limitations of any irregular conditions such as adverse weather, or taxiway and runway limitations, and other unforeseen emergency situations. A lack of

A-CDM could lead to a decrease in air traffic predictability, thus impacting the operational efficiency of ATC and its response to any adverse circumstances. A lack of coordination with other airline and airport operations could lead to a decrease in air traffic predictability, impacting ATC operational efficiency. This can lead to excessive emissions (Jeeradist, 2017).

Airport-collaborative Decision Making (A-CDM) framework

According to Eurocontrol (2012), A-CDM can oversee information sharing and collaboration at the airport. A-CDM information sharing replaces the “first come, first served” principle with the “best planned, best served” principle, which is supported by the pre-departure procedures of ATC. The airline ground handling unit can establish accurate off-block times at the airport of departure and on-block times at the airport of destination, and also receive accurate pre-departure sequencing from ATC. Information technology sharing also makes it possible to confirm the flight plan accurately. Real-time information sharing is important for coordinating other functions in A-CDM so that all phase of flight operations can be successful. Information exchange is vital for the air navigation service provider (ANSP) to allocate airport manoeuvring areas and space for departing and arriving flights.

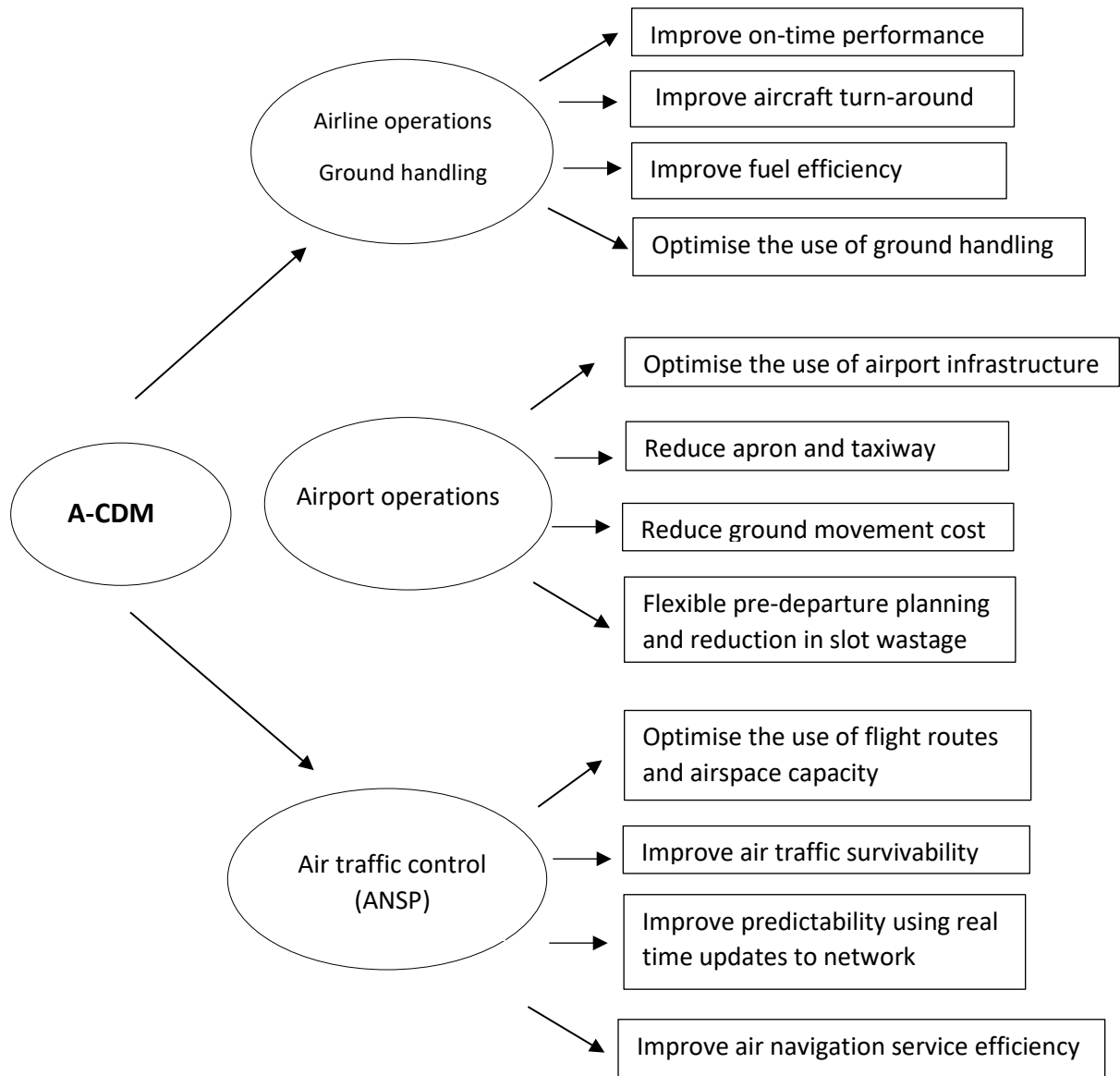


Figure 1: An airport-collaborative decision making (A-CDM) network enables the aviation industry to make improvements. Adapted from: Distribution Lab Analysis, Eurocontrol, Jeeradist (2019).

A-CDM enables partners to share information and to work together more efficiently and transparently with the common goal of improving overall performance and bringing a common situational awareness, as well as refining the processes and information flows as shown in Fig. 1. The aviation industry has to improve coordination between all participants (i.e. airline operations units, ground handling agencies, airport operations units, and ATC), if operational efficiency is to be improved.

A-CDM processes and information exchange criteria

A-CDM involves the integration of process and information sharing across airline operators, ground handling agencies, airport operators, and ATC. It has five phases, and each is divided into a large number of tasks (Capgemini, 2010). These are as follows:

Criterion A: Integrating and streamlining air traffic information

Integration and streaming centralise both airport landside and airside information flows, air traffic information services at the airports, and routes of flight in the context of the aviation industry value chain. A vital part of this criterion is purposing a data integration strategy and conducting an information technology systems analysis in order to create streamlined information.

Criterion B: Aircraft turnaround improvement

This is key in A-CDM. The focus here is on improving the efficiency of aircraft emissions by the ground equipment handling agency until the aircraft starts up for pushback, and while it is taxiing for take-off. The key functions include good planning and cooperation during the aircraft turnaround process, identifying important targets, and prioritising and timing the management of up-to-date information.

Criterion C: Improve aircraft pushback and taxi sequencing

This concerns the improvement of efficiency in flight sequencing. Important activities under this criterion are planning aircraft pushback for engine startup, calculating the sequencing of taxi times, and identifying the various associated problems. Information technology and process sharing using transparent information are needed to evaluate solutions and to analyse all influencing factors so that more accurate pushback and taxi times can be achieved.

Criterion D: Improve aircraft sequencing take-off as planned

Under this criterion, ATC must be able to improve take-off sequencing at the airports of departure and destination through information sharing with the central flow management unit (CFMU) of Eurocontrol. This criterion also includes building data flows from turnaround and sequencing processes to calculate more accurate take-off times.

Criterion E: Continuity of contingency and emergency planning

This criterion focuses on contingency and emergency plans to improve the A-CDM network, that is, the establishment of irregularity or disaster recovery and network contingency plans through information sharing using aviation information technology platforms to meet the airports' environmental responsibilities.

2.3 Aviation industry environmental policy on climate change

The aviation industry operates in a fast-changing environment, and has become increasingly environmentally aware. This has resulted in more attention being paid to the negative external effects of aviation, such as CO₂ emissions. Since 1997, the International Air Transport Association (IATA) and the International Civil Aviation Organisation (ICAO) have examined the effects of the industry on climate change. The IATA has move forward its goals to improve the efficiency of airline operations' energy consumption. The IATA goals include: (1) an average improvement in fuel efficiency of 1.5% per year from 2009 to 2020; (2) a cap on net aviation CO₂ emissions from 2020 (carbon-neutral growth); and (3) a reduction in net aviation CO₂ emissions of 50% by 2050, relative to 2005 levels (IATA, 2015).

The aviation industry recognises the need to address the global challenge of climate change, and it has therefore adopted this set of ambitious IATA targets to mitigate CO₂ emissions. The IATA strategy has four pillars: the first involves improved technology, including the deployment of sustainable low-carbon fuels; the second involves more efficient aircraft operations; the third concerns infrastructure improvements, including modernised air traffic management systems; and the fourth is a single global market-based measure. Each is designed to fill the remaining emissions gap.

In 2016, ICAO member states adopted a global carbon offsetting scheme for international aviation at its 39th session of the ICAO Assembly. Here, ICAO's Carbon Offset and Reduction Scheme for International Aviation (CORSIA) was introduced. It is the first global scheme covering an entire industrial sector. It is set to commence with a voluntary period (2021-2026), after which it will become mandatory. By the end of the ICAO Assembly, 65 states had already volunteered

to implement the scheme from its outset, covering approximately 80% of CO₂ growth for the period 2021–2035 (IATA, 2016).

The main pollutants emitted by aircraft engines are carbon dioxide (CO₂), nitrogen oxide (NO), sulphur oxide (SO), unburnt hydrocarbons (HC), carbon monoxide (CO), particulate matter (PM) and soot (EASA, EEA, Eurocontrol, 2019). A certification standard for CO₂ emissions from aircraft is being developed by the ICAO. The aim is to reach an agreement on a fully developed standard in accordance with the guidelines set out by the ICAO's committee for aviation environmental protection plenary meeting of 2016. Such improvements in global climate change policy will improve airline operational efficiency.

As a report from a workshop held in June 2006 at the Massachusetts Institute for Technology (MIT) showed, the impact of aviation on climate change can alter the earth's radiation budget and can contribute to human-induced climate change in several ways (Hodgkinson et al., 2007). Aviation industry participation in an emissions offset market would encourage investment in and the development of new technology and new solutions as part of a comprehensive climate strategy. According to the International Energy Agency (IEA) World Energy Outlook 2006, CO₂ emissions will increase by 55% between 2004 and 2030. In the absence of urgent and strenuous mitigative action, there will almost certainly be a temperature rise of between about 0.5 Celsius and 2 Celsius by 2050. Since the 1999 United Nations' (UN) Intergovernmental Panel on Climate Change (IPCC) report, chemistry transport modelling tools have been used to evaluate the impacts of aviation NO_x emissions on O₃ and CH₄, and to identify aviation's effects on the climate, including aircraft emissions of gases and particles and the NO_x and HO_x chemistry of the upper troposphere.

Develop more efficient operational practices and call for more efficient air traffic management systems and processes

The IATA has called for optimised ATC procedures, stating that “infrastructure and operations must be part of the aviation industry-wide emissions strategy to address climate change.” It has also called upon “governments, airports, and air navigation service providers to put their full weight behind further infrastructure improvements which could yield fuel efficiency benefits of up to 12% worldwide” (IATA, 2007).

The UN’s IPCC estimates that there is a 12% inefficiency in air traffic management globally. That 12% translates to 73 million tons of CO₂ emissions and nearly US\$13.5 billion in unnecessary fuel costs. Every minute of flight time can see the reduction of fuel consumption by about 62 litres and CO₂ emissions by 160 kilograms. The IPCC estimated that improvements in ATM and other aviation operational procedures could reduce aviation fuel burn by between 8% and 18%, with between 6% and 12% reductions as a result of ATM improvements in the future. According to the IATA’s CEO, aviation emissions can be reduced by optimising approach and departure procedures. Operational support to improve air transport technology and infrastructure will lead to better industry-wide air traffic management procedures. According to the Eurocontrol Performance Review Commission, greater efficiency of ATM is needed. Aircraft flying in European airspace produce excessive global warming CO₂, and this is partly the result of ATM inefficiency (Eurocontrol, 2007). The ICAO’s Committee on Aviation Environmental Protection (CAEP) met in February, 2007 and provided the following guidance to ICAO’s 189 member states “for incorporating international aviation emissions into their emissions trading schemes, consistent with the United Nations Framework Convention on Climate Change process.” These were debated at the ICAO Assembly meeting in September, 2007. They stated that aircraft operators should be the accountable international aviation entity for purposes of emissions trading, and that obligations should be based upon total aggregated emissions from all covered flights performed by each aircraft operator included in the emissions trading scheme. As was noted above, aviation industry participation in an emissions offset market would encourage investment in and the development of new technology and new solutions as one part of a comprehensive climate strategy.

2.4 Using the structural equation model (SEM) with A-CDM

The SEM is used to measure environmental improvements. The three operational functions are airline operations, airport operations, and ATC units. Twelve criteria have been proposed and incorporated into the SEM. They include improved on-time performance, improved aircraft turnaround, improved fuel efficiency, and optimised ground handling. The airport operators’ criteria include the optimisation of the use of airport infrastructure, reduced apron and taxiways, reduced ground movement costs, flexible pre-departure planning, and a reduction in slot wastage. Air traffic control and air navigation service providers (ANSPs) can optimise the use of flight route and airspace capacity, improve air traffic survivability, increase predictability using the real time updates to the network, and improve air navigation service efficiency to optimise ground handling. Each of these helps to improve the airport environment. Processes and system exchange in A-CDM can be undertaken in combination with the SEM instrument. The processes cover each flight phase (pre-, in-, and post-flight) phase, so that failure can be measured in terms of environmental responsibility, and necessary adjustments made.

Table 1: Aviation industry environmental responsibility criteria applied to A-CDM and based on the SEM

A-CDM	Aviation industry environmental responsibility criteria	Ref Code
1. Airline operator and ground handling	Improve on-time performance	A1
	Improve aircraft turnaround	A2
	Improve fuel efficiency	A3
	Optimise the use of ground handling	A4
2. Airport operator	Optimise the use of airport infrastructure	B1
	Improve the apron and taxiway utilisation	B2
	Improve ground movement cost	B3
	Flexible pre-departure planning and reduction in slot wastage	B4
3. Air traffic control and air navigation service provider (ANSP)	Optimise the use of flight route and airspace capacity	C1
	Improve air traffic survivability	C2
	Improve predictability using real-time updates to network	C3
	Improve air navigation service efficiency	C4

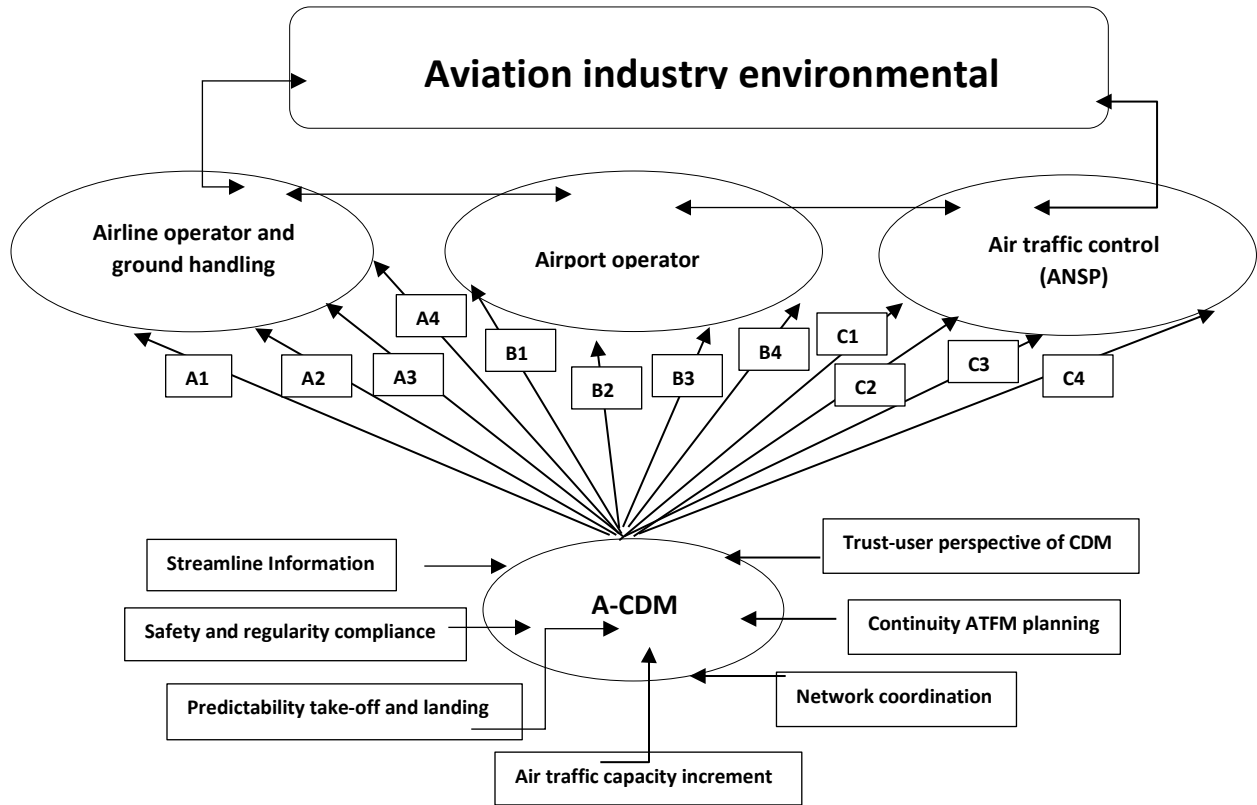


Figure 2: Proposed integrated model of A-CDM and SEM to enhance aviation industry environmental responsibility

3. Research framework and system analysis

This research framework integrates A-CDM and 12 criteria of the SEM, and encompasses airline operators, and ground handling, airport operators, ATC, and ANSPs. It includes personal interviews, focus group interviews, and direct or participatory observation of a population consisting of aviation personnel such as airline flight operations officers, airport operational staff, air traffic controllers, passengers who have had experience of the service in the aviation industry. The methodology for collecting data and system analysis is shown in Fig 3.

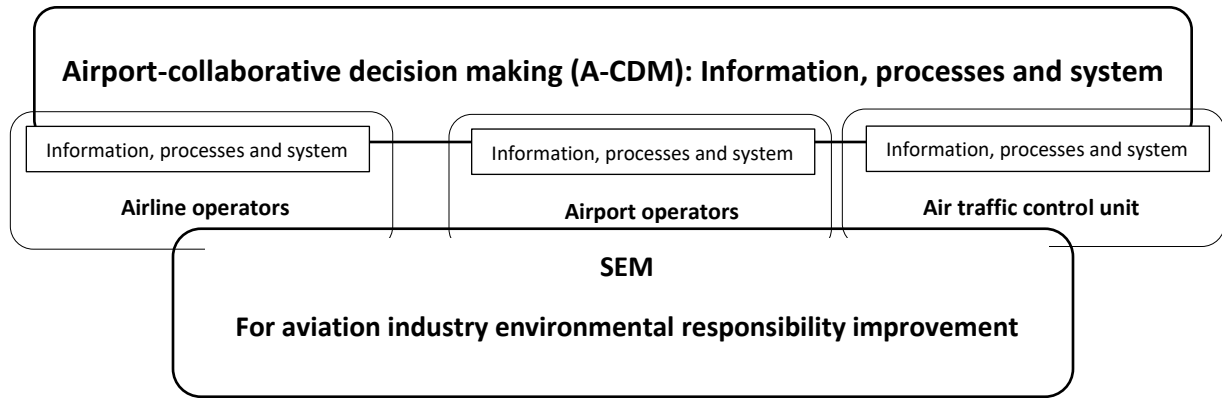


Figure 3: The integration process of information, processes and system exchange in A-CDM and SEM

3.1 Aviation industry environmental responsibility improvement

The research framework shown in Figure 2 was developed based on the proposed integrated model of A-CDM and SEM to enhance aviation industry environmental responsibility. The purpose was to improve aviation industry environmental responsibility for participants by integrating A-CDM and the SEM.

3.2 Empirical process in aviation industry environmental responsibility improvement

The qualitative method and questionnaire were based on A-CDM and SEM's 12 criteria (Table 1), which included improving on-time performance (ref coded by A1), improving aircraft turn around (ref coded by A2), improving fuel efficiency (ref coded by A3), optimising use of ground handling (ref coded by A4) by airline operators and the ground handling sector and optimised use of airport infrastructure (ref coded by B1), improving apron and taxiway utilisation (ref coded by B2), improving ground movement costs (ref coded by B3), flexible pre-departure planning and reduction slot wastage (ref coded by B4) by the airport operator sector, optimising

the use of flight routes and airspace capacity through ATC and ANSPs (ref coded by C1), improving air traffic survivability (ref coded by C2), improving predictability using real-time updates to the network (ref coded by C3), and improving air navigation service efficiency (ref coded by C4). The questionnaire was developed following the steps shown in Fig. 4. Testing and revision the A-CDM plan and the SEM was carried out by formulating questions on activity attributes for which feedback was obtained from aviation industry employees (Walden et al., 1993).

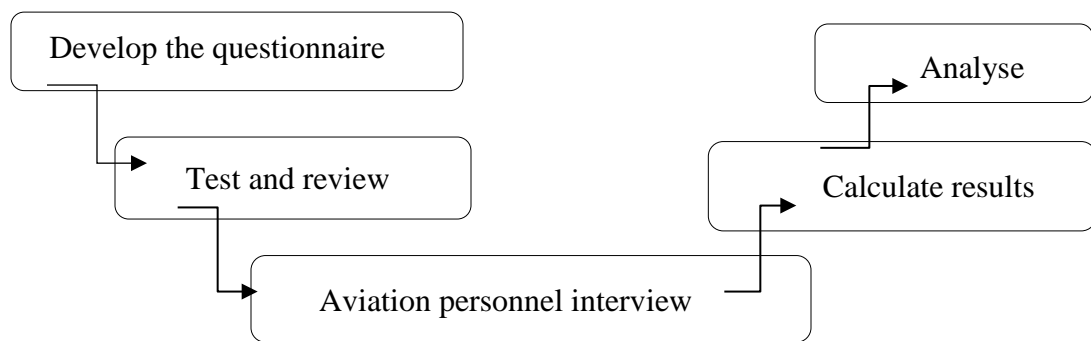


Figure 4: The questionnaire development process (adapted from Walden et al., 1993).

4. Discussion

Airport-collaborative decision making in the aviation industry is based on the premise that stakeholders in the aviation industry can assist each other. Many factors affect aviation industry environmental responsibility, such as the airport and air traffic congestion. Based on the processes involved in aviation environmental improvement, the research framework and system analysis has shown that the guidelines to measure service quality can be used to move towards the industry's goals. Using A-CDM criteria alongside the SEM can help to solve aviation's problems and

improve its participants' operational efficiency. An understanding of the SEM and A-CDM will also enhance service quality for the benefit of all.

The research was conducted within the guidelines framework and using a questionnaire. Also, interviews with industry personnel, focus groups, and observations of procedures have been conducted to investigate the problems encountered. The results were calculated and analysed. The A-CDM (with 12 criteria) and the SEM were applied as the guidelines to survey aviation industry environmental responsibility. The research framework and system analysis methodology were developed to investigate how aviation industry environmental responsibility might be enhanced.

5. Conclusion

The purpose of this research was to study and propose a conceptual framework for environmental responsibility management to achieve higher quality, so that participants might enjoy a better service experience. The study and discussion were conducted within a research framework that integrated A-CDM principles and SERVQUAL, both of which can be used to improve aviation industry service quality and operational performance. Airport-collaborative decision making has been applied as a tool to improve aviation industry service quality. The study has shown that service improvements in the aviation industry are extremely important for its management, and that performance is related closely with improved service quality. The SERVQUAL model and A-CDM principles can be combined to integrate service quality criteria; service improvement will enable the aviation industry to move towards fulfilling its environmental responsibilities.

References

- Capgemini (2010), Collaborative Decision Making in Aviation. Capgemini's CDM Implementation. Center of Excellence Aviation
- Candalino Jr., T.J., Kobza, J.E. and Jacobson, S.H. (2003). *Designing optimal aviation baggage screening strategies using simulated annealing*, 0305-0548(03). Elsevier.doi:10.1016/S0305-0548(03)00118-7
- Charles, p.&Thomas,C., *Management information Systems : Strategy and plan* 2nd ed.(New York : McGraw-Hill,Inc., 1993)
- Christian Gronross, (1982).An Applied Service Marketing Theory", *European Journal of Marketing*, Vol. 16 Iss: 7, pp.30 - 41
- Civil Air Navigation Services Organisation (CANSO 2016)
- Deb, S. (2007) Airline industry models new operational standard on ISO 9001:2000 ISO Management Systems, March-April
- EUROCONTROL Annual Report 2012
- Gilbert, D. and Wong, R.K.C. (2002). Passenger expectations and airlines services: a Hong Kong based study. Elsevier.doi:10.1016/S0261-5177(03)00002-5
- Golden, P.N., Debanjan, M. and Moorman, C. (2012). What Is Quality? An Integrative Framework of Process and States. *American Marketing Association*, ISSN: 0022-2429
- Headley, D.E. and Bowen, B.D. (1997). International Airline Quality Measurement. *Journal of Air Transportation World Wide* Vol. 2 No. 1
- Ilker Yılmaz (2016), Emissions from passenger aircraft at Kayseri Airport, Turkey, *Journal of Air Transport Management* 53 131-139, Elsevier
- Janic, M. (2000). An assessment of risk in civil aviation, *Journal of Air Transport Management* 6, 43-50. 0696-6997/00, Pergamon PII :0969-6997(99)00021-6
- Liou, J.J.H., Tzeng, G-H. and Chang, H-C. (2007). Airline safety measurement using a hybrid model. *Journal of Air Transport Management*, Vol. 13, Iss. 4, July, 243-249
- Liou, J.J.H., Yen, L. and Tzeng, G-H. (2008). Building an effective safety management system for airlines. *Journal of Air Transport Management*, 14 (2008) 20-26
- McLean, D. (2004). *Measurement and control in aviation. Aircraft Engineering and Aerospace Technology*, Emerald Group, doi 10.1/00022660410555112

- Parasuraman, A., Zeithaml, V.A., and Berry, L.L. (1985). A Conceptual Quality and for Model of Service Its Implications Future Research. *Journal of Marketing*, 49(4), 41-50
- Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1988). SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64, 12-40
- Park, J-W., Robertson, R. and Wu, C-L. (2005). Investigating the Effects of Airline Service Quality on Airline Image and Passengers' Future Behavioral Intentions: Findings from Australian international air passengers. *The Journal of Tourism Studies* Vol. 16 No. 1, May
- Robin Ghosh, Thomas Schilling, Kai Wicke (2016). Theoretical framework of systems design for the air transportation system including an inherently quantitative philosophy of scenario development. *Journal of Air Transport Management* 58-67
- Simon Okwir, Pernilla Ulfvengren, Jannis Angelis, Felipe Ruiz, Yilsy Maria Núñez Guerrero. Managing turnaround performance through Collaborative Decision Making *Journal of Air Transport Management* 58, 183-196 (2017)
- T. Jeeradist, N. Thawesaengskulthai, T. Sangsuwan, Using TRIZ to enhance passengers' perceptions of an airline's image through service quality and safety. *Journal of Air Transport Management*. 53 (2016) 131-139, Elsevier.
- Wen, C-H. and Chen, W-Y. (2010). Airlines' Competitive Positioning Using Multiple Correspondence Cluster Analysis. *12th WCTR, July 11-15*
- Zhang, J., Chai, K-H. and Tan, K-C. (2009). 40 Inventive Principles with Applications in Service Operations Management.