Impact of Facebook on leisure travel behavior of Singapore residents

Veena Jadhav, Seetha Raman, Nitin Patwa, Krishna Moorthy and John Pathrose

Abstract

Purpose – *Social media has fundamentally changed the leisure travel behavior of Singapore residents. The purpose of this paper is to focus on Facebook and its impact on travel behavior. The study focuses on Singapore residents.*

Design/methodology/approach – *A total of 16 input and five output variables were tested, with a sample of 203 Facebook users residing in Singapore. Primary data modeling was done using ADANCO, a structural equation modeling tool that uses composite modeling approach for hypothesis testing. The analysis performed an estimated structural model and then determined the best model fit by measuring reliability, validity and path analysis and estimating model parameters.*

Findings – *Research findings indicate that Facebook has had a strong behavioral influence on the frequency of travel, itinerary planning and social sharing, while it had no impact during the destination-selection stage of travel planning.*

Originality/value – *Facebook's influence on leisure travel behavior confirms the theory of planned behavior proposed by Icek Ajzen. From Facebook's perspective, the outcome of this study is helpful in recommending the best use of the platform for destination providers.*

Keywords Singapore, Tourism, Social media, Facebook, Leisure travel

Paper type Research paper

Veena Jadhav is the Assistant Dean and an Assistant Professor of HRM at the SP Jain School of Global Management, Singapore. Seetha Raman is based at the SP Jain School of Global Management, Singapore. Nitin Patwa is based at the SP Jain School of Global Management, Dubai, United Arab Emirates. Krishna Moorthy is based at the Universiti Tunku Abdul Rahman, Kampar, Malaysia. John Pathrose is based at the SP Jain School of Global Management, Singapore.

Introduction

Urban tourism has gained a considerable momentum in the tourism research since 1980s (Ashworth, 1989, 2003). One of the major reasons of lack of such research till date in urban tourism is immediately confronted by paradoxes (Pearce, 2001). Though being an incredibly important worldwide form of tourism (Edwards *et al.*, 2008), it gained the disproportionately small amount of recognition among researchers. In addition to restored place and pride, opportunities such as new enterprise, volunteering and education are increasingly gaining focus in tourism. Availability of service and infrastructure equally plays a vital role, without which tourism does not reach its full potential (Page, 1995).

International outbound leisure travel trips by Singaporean residents are estimated at 8.7 million for 2014 and are forecasted to grow by an average of 5.3 percent per year to reach 11.8 million trips by 2020. According to Visa's Global Travel Intentions Study (2015), 95 percent of Singaporeans have traveled abroad, and 85 percent cite leisure as their main purpose for travel. In the next two years, Singaporeans intend to take more leisure trips (four trips), spending US $1,643.00 on average per trip. This accelerating leisure travel trend by Singapore residents is a significant business opportunity on which destination providers can capitalize.

With an average Singapore resident spending 2.1 hours/day on Facebook, the channel now influences 50 percent of all purchase decisions made in the country (source). For destination providers and tourism promoters, this means a need for rapid change in all aspects of travel-decision influences and has become critical for understanding the behavioral change social media has brought about in the decision-making process (Hays *et al.*, 2013). This goes beyond not only influencing someone to travel to a destination but also effectively using a traveler to become the mouthpiece to influence his/her network using social media.

A review of the literature shows that many studies have been conducted to understand the impact of social media on various aspects of travel behavior, right from the consumer's decision process (Hudson and Thal, 2013) to online travel information search (Xiang and Gretzel, 2010) and understanding the motivations behind sharing tourism experiences through social media (Munar and Jacobsen, 2014). Consumer behavior, when it comes to travel and tourism, has historically always been influenced by developments in technology-based information communication systems (Buhalis, 1998; Poon, 1993). Findings from research on social media use and impact during the holiday travel-planning process (Fotis *et al.*, 2012) suggest that social media travel-related research should place equal emphasis on all stages of the travel-planning process.

Studies conducted to understand the relationship between behavior and culture state that learned behavior is the substructure of human cultures, and the transmission of learned behavior powers the evolution of human cultures (Glenn, 2004). Findings of Cox *et al.* (2009) and Fotis *et al.* (2012) suggest cultural differences contributing to the impact social media has on holiday planning and are recommended as a critical dimension while studying the subject.

Based on the literature reviews and market penetration reports, there is a need to understand behavioral changes within a cultural context; hence, this study focuses on Singapore residents. While existing research primarily studied social media as an ecosystem where there is interplay of multiple channels, this is a focused study of the role played by Facebook, which has a staggering 72 percent market share, in influencing leisure travel behavior.

This research is expected to onboard a deep understanding of the role played by Facebook in influencing leisure travel behavior that leads to change in leisure travel frequency, a shift in how travelers select their travel destination, how they go about planning the trip and actions they take during and after travel. The outcome of this research in the above-mentioned areas will enable destination providers to effectively influence Singapore residents to visit their destinations, engaging them effectively right from the consideration phase through advocacy.

Research questions

RQ1. Does Facebook influence leisure travel behavior of Singapore residents?

RQ2. Does Facebook play a role in influencing behavior at all stages of the travel process?

RQ3. Has Facebook played a role in enhancing leisure travel experience?

RQ4. Does Facebook's influence in leisure travel behavior compare and conform to the theory of planned behavior proposed by Icek Ajzen?

Literature review and research structure

The impact of behavior change for leisure travel can be seen in four key areas along the travel process. As Facebook gains momentum in Singapore with high penetration and active use rates, the behavioral change it drives pertaining to leisure travel can be seen in the frequency at which Singapore residents travel, destination selection, trip itinerary and social-sharing behavior.

Frequency of travel

According to a travel intentions study by Visa conducted in 2015, the average leisure trips taken by Singapore residents in a year are expected to go up to four in the coming years. There are limited numbers of studies to understand the factors that influence travel frequency in recent years. Alegre and Pou (2006) studied the microeconomic determinants of travel frequency and concluded that travel frequency is not an exogenous variable and is influenced by household preferences, time and budget constraints. A study conducted by Kroesen and Handy (2014) concluded that taking holidays positively affects contentment, but most likely, no hedonic level of affect or happiness can be enduringly raised by increasing holiday frequency. Since the last found study on frequency of travel was during a time when social media was not a critical part of

everyday life, this research considers the influence of the Facebook network and activities as a factor that drives frequency of travel:

H1. There is a relationship between Facebook usage and frequency of leisure travel by Singapore residents.

Time

Availability of time is a critical factor that influences the frequency of leisure travel. Decision making is more heuristic in situations that involve spending time rather than money (Saini and Monga, 2008). Modern technologies have greatly shaped how knowledge workers define work and personal life and how they demarcate boundaries between the two domains (Chen and Karahanna, 2014). Singapore, with its high technology penetration and employment rate, faces the blurring lines between personal and professional life, and leisure travel becomes a getaway from professional life – explaining the findings from a global travel intentions study in 2015, which states that 95 percent of Singaporeans have traveled abroad for leisure in the past two years.

Affordability

According to a study conducted by MasterCard, about 86 percent of outbound trips in Singapore are accounted for by households earning above US$30,000 per annum in 2014. This range accounts for about 77.4 percent of all households and suggests that outbound travel is quite evenly spread across income levels. Financial ability plays a significant role in travel frequency, but with information available via social media and other channels, it might also mean that Singaporean travelers are making more informed decisions, whereby they avoid wastage, enabling them to travel at a higher frequency with the same investment. Visa's global travel intentions study also shows that Singaporeans are careful planners, with more than 50 percent planning and booking everything before they arrive at their destinations.

Proximity

While lack of or low domestic tourism is one of the main reasons why Singapore residents travel abroad for leisure, the extent of available destinations around Singapore is a critical factor that is increasing the frequency of travel. These nearby destinations, coupled with a strong network of low-cost carriers and a powerful currency, improve the feasibility of traveling abroad. According to GFK's Travelscan data, China and Thailand remained the top two destinations for Singapore travelers in 2016, while Hong Kong replaced Indonesia as third this year:

H2. Destination selection is associated with the frequency at which Singapore residents travel for leisure.

Network

As of June 2016, Singapore is home for 0.52 million permanent residents (non-citizens) and 1.67 million expats, making the citizen-non-citizen ratio 61:39. A big portion of the non-citizen base is from neighboring countries, like India, China and Malaysia, which brings an influx of visiting family and friends to Singapore. Singapore, being the regional headquarters for many global businesses, also attracts a frequent pool of friends and family traveling in for business purposes. The resident population, especially non-citizens, thus has an increased leisure travel frequency, as their friends/family visiting them in Singapore become an occasion/reason to make an overseas trip (mainly to South East Asian countries).

Destination selection

A study by While suggests that travel-related images posted on Facebook generate interest about a destination to viewers. Fotis *et al.* (2012), studying the impact of social media on

residents of FSSU Republics, concluded that social media is used during all stages of holiday planning. On the contrary, Cox et al. (2009), in their study to understand the role of social media during the travel-planning process, concluded that it was primarily used after selecting the holiday destination, as the channel was found to be less trustworthy than traditional sources. Interestingly, research conducted before the evolution of social media concluded that destination selection is a decision made under conditions of uncertainty, using indirect symbolic or social information, due to inadequate knowledge (Um and Crompton, 1992). The results from earlier studies that broke down the destination-selection process and recent ones specifically focused on the influence of social media suggest that a key gap that existed earlier in making destination selection, i.e. knowledge, has been mitigated by Facebook and other user-generated content channels (Chen et al., 2014):

H3. Facebook consumption is related to the destination a Singapore resident selects for leisure travel.

Travel group

A quick look at the changing demographics of Singapore residents shows significant alterations in the group with which Singaporeans travel and where they go. As per 2015 statistics, 59.4 percent of all Singapore residents (15+ years) were married, while there has been a substantial growth in the percentage of singles below the age of 29 over the last ten years. Only 54.3 percent of households in Singapore have children, while the percentage of couple-based households without children has reached 15.3 percent (from 13.3 percent) over the last decade. Visa's travel intentions study suggests family bonding as the leisure travel motivation for 57 percent of Singapore residents and holidays with partner/spouse for 55 percent. Singapore also has a lower inclination to travel alone (19 percent) as compared to the global average of 24 percent.

Safety and security

Tourism is a prime victim of terrorism (Bac et al., 2015) and unrest. Given the volatility in the socio-political-economic environment, safety is a critical criterion during travel planning. Glaesser (2006) studied the impact of natural disasters vs terror attacks in tourism and concluded that negative events caused by humans impact confidence in a long-lasting way as compared to natural calamities. The Bali terror attacks reduced hotel room occupancy rates to less than 10 percent from a soaring 75 percent (Baker and Coulter, 2007). Health threats and transferable diseases are becoming a part of risk evaluation while evaluating a destination. Mad cow disease in the UK, HIV in Africa, the recent outburst of the H1N1 threat, etc., form a long thread of health-risk factors that have influenced destination selection. Specific to Singapore, many of the frequently visited countries in the region, such as Japan, Indonesia and the Philippines, are highly prone to natural calamities and are a bigger safety hassle than terrorism in the region.

Apart from the hard safety and security concerns, there is an added element of "tourist friendliness" that plays a role in the destination-selection process. Dredge and Jenkins (2003) revealed the positive impact of a picture accompanied by a title and short description in projecting a positive destination image – naturally, making social media a key vehicle in communicating the tourist friendliness of a destination.

Travel period

Tourism is a seasonal business, because climate and seasons play a crucial role in selecting the right destination. Lohmann and Kaim (1999) studied weather and holiday destination preferences in Germany and concluded that weather is the third most important factor in selecting a destination. Causes of seasonality in the tourism industry were split into two categories (Baron, 1975; Rudihartmann, 1986): institutional factors (holidays, religious/social events, etc.) and natural factors (temperature, rain, snow depth, etc.). Mieczkowski (1985) produced a Tourism Climatic Index for evaluating tourism activity based on five climate-driven human-comfort indices. Sporting and other entertainment event-related leisure travel is also on the rise (e.g. Ski tourism in

Hokkaido) in the region. Tourism providers have actively promoted seasonal destinations (e.g. cherry blossom in Korea and Japan). Popular travel magazines like *Lonely Planet* and *Conde' Nast Traveller* regularly publish the top destinations for travel in a particular month based on favorable natural or institutional factors.

Passion and interest

Butler (2001) studied seasonality in tourism and introduced sporting season as one of the drivers of tourism seasonality. While there is dependency on the group with which one travels, a traveler's passion and interest influence destination selection. A study by Josiam *et al.* (1999) to learn travel motivation using the push and pull typology shows that destination selection is a two-step process, whereby push factors, which include travelers' passion and interests and forming the first step of the travel decision, are followed by destination-specific pull factors, which motivate the traveler to decide on a specific destination. Growth of destinations, positioned for scope in adventure, shopping, off-road experiences, etc., leads to the formation of passion- and interest-based push factors when considering a destination.

Itinerary planning

When it comes to usage of such travel information websites as Trip Advisor, Singapore has a usage rate of 62 percent, almost double its counterparts in the region. Studies also suggest that Singapore residents are thorough with their itinerary planning, where more than 50 percent of travelers plan and book everything before they travel. Xiang and Gretzel (2010) found that social media is a critical part of the online tourism domain, contributing substantially to the trip-planning process. Content available on the internet pertaining to travel can be broadly grouped under user-generated content and industry-generated content. User-generated content triumphs over industry-generated content for recency and relatability, powered by the features built into these websites that facilitate reactions and sharing. Once the destination is decided, four major areas of itinerary research are accommodation, food, attractions and commute:

H4. Facebook usage has a relationship with itinerary planning, involving stay, food, commute and activities during the trip.

Attractions

Considering the high 82 percent internet-penetration rate and the findings by Gretzel and Yoo (2008) that travelers with greater internet skills are more involved in trip planning, social media and user-generated content play a significant role in deciding on attractions one plans to visit during a trip. Studies conducted by Arsal *et al.* (2008) point to the fact that travel reviews are used by travelers at all stages of travel, including what to do at the destination.

Gretzel and Yoo (2008) conclude that positive impact of other travelers' online reviews on the planning process helps them select the attractions to visit and those to avoid, along with other ideas for how to make the trip memorable. Social media and travel-related, user-generated content also remove uncertainty and instill confidence while planning the itinerary. Over 80 percent also agree that reading other travelers' online reviews increases confidence in decisions, makes it easier to imagine what a place would be like, helps reduce risk/uncertainty, makes it easier to reach decisions and helps with planning pleasure trips more efficiently:

H5. Destination selection for leisure travel is related to the itinerary planned by Singapore residents.

Food preference

Eating is a social activity, and one's eating behavior and preferences are influenced heavily by social factors (Cruwys *et al.*, 2015). According to a 2016 research, food is the category of highest

engagement, with 57 percent of Pinterest users pinning, re-pinning and interacting with food-related content. A survey by Sopexa in 2015 revealed that the internet is the No. 1 source of food information for 86 percent of respondents. While traveling, two key factors lead to deciding between food options – confidence in quality/flavor and accumulation of cultural capital. Reviews and compounded ratings by a community of travelers become trustworthy recommendations, while also becoming a source to learn the right food trials and experiments to make in terms of local cuisine.

Wang *et al.* (2016) studied food sharing by travelers on social networking sites and learned that capturing and sharing food-related experiences and moments can be considered an example of an experience of co-creation, as studied by Prahalad and Ramaswamy (2004).

Internal travel

Lack of knowledge and unfamiliarity about the destination is one of the key sources of risk (Yu and Chang, 2009) when it comes to tourism. While global, standardized travel-technology products like Uber have improved the familiarity and accessibility of travel options during travel, there still exist local risk factors of which travelers need to be aware. Social media and user-generated content play a role in informing travelers about their commute options, things to watch out for and the right price to pay for the trip. The interactive nature of social media platforms allows travelers to get solutions for their unique problems in a relatively short time frame, making internet and social media channels the go-to places when it comes to understanding internal travel options. Reliability of travel options from a safety and cost perspective is the primary information social media provides travelers, along with discovering ideal travel options from point A to point B.

Accommodation

Almost 88 percent think that travel reviews are important for deciding where to stay (Gretzel and Yoo, 2008). A study by Ye *et al.* (2011) showed that user-generated content and media significantly impact online room-booking behavior. Options for traveler lodging have exploded in the recent past, with websites such as Airbnb providing bed-and-breakfast options on websites like TripAdvisor and Expedia and providing user ratings, reviews and photographs. Photographs taken and shared on social networks lead to positive images (Jenkins, 2003), influencing accommodation decisions during the trip-planning stage.

Social sharing

Social sharing plays a key role in feeding the need of an information-intense industry, as established by Wang *et al.* (2002). While there are multiple studies that conclude that information shared by travelers helps consumers make informed decisions about their leisure travel, there are not a lot of studies conducted to understand why travelers share their experiences on social platforms. One of the most comprehensive studies (Kang and Schuett, 2013) to learn why travelers share their experiences on social platforms concluded that internalization and identification are conceptual foundations that positively influence social sharing. Wang *et al.* established a strong relationship between participation in social travel groups and perceived social benefits.

Based on a survey conducted by Internet Marketing Inc., 76 percent of travelers post their vacation photos to social networks, and more than half of the respondents used information available on social media and other user-generated content portals to make critical travel decisions. There is indeed a build-up of give and take, where travelers feel the need to make a genuine update about their experiences, as they were beneficiaries to the socially available information themselves. While platforms that facilitate social sharing have come a long way in making it easy and effortless to share experiences in multiple formats, destination providers have also benefited from using user-generated content to improve their offering to future travelers:

H6. Experience sharing on Facebook is associated with leisure travel behavior of Singapore residents.

Available gadgets

Gadgets that allow travelers to track, learn, update and share information and, most importantly, to stay connected have enhanced travel and tourism experiences (Mamaghani, 2009). In the technology space, mobile phone manufacturers focus on reimagining the functionality of smartphones to produce powerful content (360-degree photos, cinema graphs, time-lapse videos, etc.) worth sharing and then enabling easy and quick ways to post on all social media platforms, even when offline. The last couple of years also saw an adventure-travel speciality product, such as GoPro gained high-velocity growth, mostly powered by the quality of the sharable content that it can produce. There is a surge in DSLR camera users, photography training classes and picture/video-enhancement mobile applications – all of this driving to improve the quality of shared content on a network.

Internet connectivity

The travel and hospitality industry thrives on positive user-generated content. Recent times have seen a surge in travelers' need to stay connected while traveling, giving birth to a significant growth in institutions and locations that provide free internet connections (Wi-Fi) to patrons. Wi-Fi has become a norm for hotels, and it is almost becoming a standard practice to share Wi-Fi details when someone that has an experience to offer walks into a café or any other location. Many hotels have started providing handsets with local SIM cards that enable their guests to stay connected and share their experiences. Social-sharing websites have also introduced ways to improve location-based social media usage with concepts such as location tagging and checking in.

Extreme experience

Social-sharing behavior is influenced by a positive or negative experience during travel. Rimé *et al.* (1992) showed the instant sharing behavior of extreme emotional experiences, proposing that social sharing represents a critical element of emotional experiences. Facebook, for instance, provides an option to express your emotion at the time of sharing a post, where you can pick up an emotion from the "I'm feeling" list. From a list of many experiences captured during the visit, those that generate maximum eyeballs and emotions from the network are preferred for sharing – the need for this is built into a platform such as Facebook, where the algorithm itself optimizes for posts that get maximum engagement. A study conducted by Rimé *et al.* (1998) confirmed that emotions elicit a social-sharing process, but the relationship between emotional intensity and extent of sharing remains complex:

H7. Sharing travel-related content on Facebook is related to the destination selected for travel.

Social stamp

Platforms such as Facebook are built for engagement, increasing the need for users to produce content that is of high engagement value. Demonstration effect, as studied in sociology and economics, takes a social flavor on channels like Facebook, where observation of the actions and updates of others in a Facebook user network becomes the catalyst for the viewer's actions. Kang and Schuett (2013) understand that social-sharing behavior of travelers draws upon the fact that individuals may feel pressured to share information on social channels, due to the influence of compliance. Given the active use and the amount of time spent on social media channels, letting your network know about your experience is also a way to engage with your network and initiate conversations.

Based on the literature review and developing the hypotheses (*H1-H7*), the questions were derived from a research gap that exists in understanding travel behavior changes in Singapore residents due to high Facebook usage. The criticality of studying behavioral changes within a cultural framework was identified in existing literature, which leaves a research gap in studying Singapore as a market when it comes to travel behavior changes. Also, previous studies

around travel behavior focused on social media, and hence, a deep study of the impact of a single social media platform (i.e. Facebook) on travel behavior exists as a research gap that this study aims to fill.

Research methodology

There were three components used to collect primary and secondary data for this research:

1. Online questionnaire: primary data were collected through an online survey of residents of Singapore. The survey preceded two qualifying questions to make sure that the respondent was a Singapore resident and a Facebook user.

2. Literature review: secondary data were collected by reviewing 34 academic journals in Thomson Reuters ISI, leveraging previous studies to understand the research gap and to understand recommended inclusions for future behavioral studies.

3. Market research data: quantifying the scope of this research was done through a review of market research by various organizations, including Singapore Government and other independent organizations.

Theory building

The theory of planned behavior (Ajzen, 1991) suggests that behavior is dependent on one's intention to perform the behavior. Intention, in turn, is driven by three factors – attitude toward the behavior, subjective norm and perceived behavioral control as in Figure 1.

With the significant relationship between Facebook usage and satisfaction from leisure travel, it can be argued that Facebook has played a critical role in driving a positive attitude toward leisure travel behavior. Subjective norms, which refer to beliefs about what other people think one should do or general social pressure, are established with the significance level that this research saw between social-sharing and travel behavior, especially with respect to the influence receiving a social stamp has on experience sharing. High level of trust on travel-related content consumed on Facebook drives predictability and instills confidence, which positively influences travelers' perception of their ability to derive a positive experience from the trip. Based on the above, it can be concluded that the behavioral influence Facebook has on leisure travel conforms to the theory of planned behavior.

Based on theory of planned behavior and prior research related to perceived integration, a research model that reflects the impact of Facebook on leisure travel behavior is developed. Based on the primary and secondary data collected, the dependent and independent variables were identified, and their relationship is represented in Figure 2.

Figure 1 Theory of planned behavior

Source: Ajzen (1991)
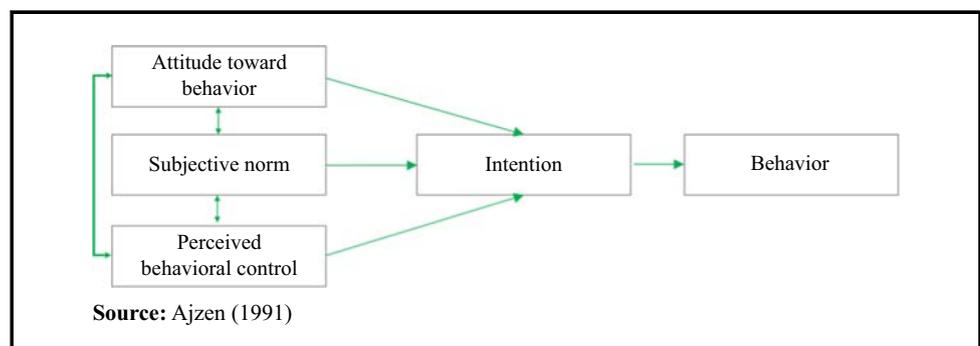
Figure 2 Research framework
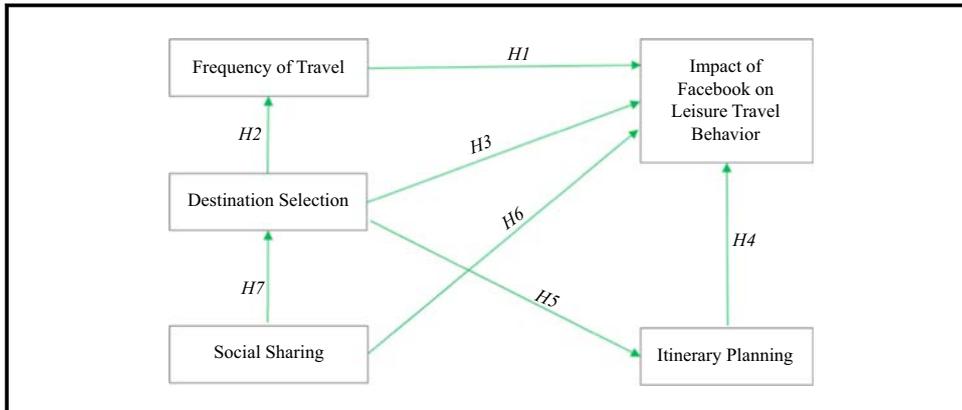
Data collection

Based on the research gaps and recommendations from related researches, a questionnaire was prepared to learn the impact Facebook has had on travel behavior of Singapore residents across all stages of their travel process. This online questionnaire was distributed via e-mails, Facebook, direct messages and WhatsApp to gather responses. The survey had two qualifying questions to confirm that the respondent was a Singapore resident and a Facebook user, and the survey was conditionally formatted to end if answers to any of the qualifying questions were negative.

Before making the survey publically available, it was pre-tested with a closed group to ensure that the results resonated with the actual behavior of the respondent. One key insight from the pre-test was to position Facebook as an influence of travel decisions, as the respondents went through multiple platforms and channels to make travel decisions and could not point out Facebook as "the" platform that leads to certain travel decisions and behavior.

Profile of respondents

While eliminating non-residents and non-Facebook users with the qualifying questions did the primary job of bringing in a quality sample, measures were taken to ensure that: a wide spectrum of audience was reached, for which the survey was circulated using five different channels; the majority of the respondents actively engaged in leisure travel, defined as two or more trips made in an year; the majority of respondents were active users of Facebook, defined as using Facebook at least once a day; and the majority of respondents were between the ages of 25 and 40, as they were more likely to be digitally savvy, lead an active life and use technology for decision making.

Survey demographics and preferences

The survey had 16 questions to determine the impact of independent variables on the dependent variables, five questions pertaining to the output metrics and four demographic-based questions. Except for demographic questions, all other responses were put on a five-point Likert scale – strongly agree, agree, neither agree or disagree and strongly disagree. The respondents included a good mix of Singapore citizens, permanent residents and expats. Out of 250 responses, almost 20 percent failed to clear the qualifying questions, and 203 valid responses were used for this analysis.

Table I gives the survey respondents' demographics and preferences.

Of all respondents, 80 percent were daily Facebook users, including 58 percent power users who log in to Facebook several times a day; 86 percent of all respondents had taken more than one leisure trip annually, with a maximum of them (36 percent) taking three leisure trips in a year; 80 percent of the respondents fell within the 30-55 years of age bracket, and 62 percent were

Table I	Survey respondent demographics and preferences					
Age and gender	*< 25 (%)*	*25-30 (%)*	*31-40 (%)*	*41-55 (%)*	*55+ (%)*	*Total percentage*
Female	8.40	10.92	55.46	22.69	2.52	61.66
Male	2.70	14.86	58.11	22.97	1.35	38.34
Current occupation						
Student						3.11
Employed						*74.09*
Self-employed						12.44
Homemaker						7.25
Unemployed						2.59
Others						0.52
Facebook usage frequency						
Several times daily						*58.03*
Once daily						22.80
Several times weekly						12.44
Once weekly						3.63
Monthly						3.11
Leisure trips per year (2-year average)						
No trips in a year						2.55
1 trip a year						11.73
2 trips a year						*35.71*
3 trips a year						17.35
4 trips a year						12.76
4+ trips a year						19.90
Average budget per trip						
< S$500 per trip						0.51
S$500-1,500 per trip						26.53
S$1,500-3,000 per trip						*45.41*
S$3,000-5,000 per trip						19.90
> S$5,000 per trip						7.65
Leisure travel companion						
Alone						4.08
Partner						16.33
Family						*62.76*
Friends						16.48
Tour group/guided tour						0.00

female; 87 percent either had a job or were self-employed; 62 percent of the respondents were most likely to go on a holiday with their families, while 33 percent mentioned going with friends or partners. In terms of travel budget, 45 percent of the respondents spend in the range of S$1,500-3,000, and 27 percent spend below S$1,500 per trip, while only 7 percent keep an average trip cost of S$5,000 and above.

Data analysis

Primary data collected were modeled using a structural equation modeling tool called ADANCO Statistical package (PL-SEM). ADANCO uses a composite modeling approach for hypothesis testing, eliminating the imposition of normality conditions to data. Data analysis was performed first by modeling an estimated structural model and then by determining the best model fit by measuring reliability and validity, followed by undertaking path analysis and estimating model parameters (Dijkstra and Henseler, 2015; Henseler *et al.*, 2012).

Reliability

Chonbach's α, with a value above 0.6, indicating good reliability level, was used to determine the reliability of model fit. As an indication of integrity and homogeneity of the model, composite reliability was measured using Jöreskog's ρ_c. Statistics for each construct are stated in Table II.

Table II	Overall reliability of the constructs			
Construct		R^2	*Jöreskog's ρ_c*	*Cronbach's α*
Impact of Facebook on leisure travel behavior		0.6948	0.9558	0.9423
Social sharing			0.9130	0.8727
Itinerary planning			0.9491	0.9286
Destination selection			0.9105	0.8695
Frequency of travel			0.9285	0.8974

Convergent validity

Convergent validity was used to examine construct validity and to measure the indicator variables using conformity scores. AVE equal to or above 0.5 (Dijkstra and Henseler, 2015) was kept as the threshold accepted value, and the values in Table III indicate all constructs clearing the threshold of 0.5 AVE.

Discriminant validity

The degree of differentiation between the variables was examined and compared with the other constructs of the research. The AVE of the other constructs should be less than the square root of the average variance extracted from a particular construct (Dijkstra and Henseler, 2015). Tables IV and V show that the model has discriminant validity.

Table III	Convergent validity
Construct	*Average variance extracted (AVE)*
Impact of Facebook on leisure travel behavior	0.8125
Social sharing	0.7242
Itinerary planning	0.8235
Destination selection	0.7179
Frequency of travel	0.7645

Table IV	Discriminant validity				
Construct	*Impact of Facebook on leisure travel behavior*	*Social sharing*	*Itinerary planning*	*Destination selection*	*Frequency of travel*
Impact of Facebook on leisure travel behavior	0.8125				
Social sharing	0.6078	0.7242			
Itinerary planning	0.5815	0.5608	0.8235		
Destination selection	0.2367	0.2118	0.2966	0.7179	
Frequency of travel	0.2438	0.2013	0.1856	0.3763	0.7645
Notes: Squared correlations. AVE in the diagonal					

Table V	Significance levels
Significance	*t-value*
Level of significance	
$p < 0.1$	1.65
$p < 0.05$	1.96
$p < 0.01$	2.59

Seven hypotheses were postulated in this research, and their reliability was verified against the recorded t-values of independent variables on the dependent variables, as shown in Table VI.

Research findings

Six hypotheses were passed with significantly strong path coefficients, while the hypothesis (*H3*) of destination selection influenced by Facebook has been rejected.

To test hypotheses about observed and latent variable relations, a structural equation model (SEM) is deployed to analyze the path coefficients of individual constructs. Path analysis with SEM is based on linear statistical models and assumes multivariate normality, bringing visibility in to measure imperfections, errors and unexplained variance.

Below are the details of the findings for each of the hypotheses.

H1 examines the influencing factor – frequency of travel – on the impact of behavioral changes Facebook had on leisure travel. Travel frequency shows a strong influence (t-value $= 2.1735$, CI > 95 percent); thus, *H1* ($\beta = 0.138$, $p < 0.05$) is accepted. This finding establishes the relationship between growth in Facebook penetration and its active usage in Singapore to the global travel study that claims a surge in leisure travel frequency in the coming years. This result furthers the study by Alegre and Pou (2006), which demonstrated household preferences, time and budget constraints as primary factors influencing travel frequency.

In the SEM model shown in Figure 3, a traveler's friends' network and their activities on Facebook has the highest effect of influencing travel frequency with 0.902 as its path coefficient. Three other individual constructs, namely time (0.849), affordability (0.888) and proximity (0.857) are above 0.8, signifying the strong effect these variables have on influencing leisure travel frequency.

H2 looked at the influencing factor destination selection to the frequency in which Singapore residents travel for leisure and showed a strong influence (t-value $= 12.5345$, CI > 99 percent), thus accepting the hypothesis. Singapore residents, being on a small island with limited domestic travel opportunities, are naturally inclined toward making a trip abroad, mostly to nearby South East Asian destinations. Ease of execution, cost and familiarity of many destinations in close proximity is also a significant reason for the strong relationship between destination selection and travel frequency. This is a new contribution, as there is no existing literature that establishes a relationship between destination selection and its impact on travel frequency, a relevant area of study in regions with a cluster of small nations, like South East Asia.

The only rejected hypothesis was destination selection as an influencing factor to travel behavioral changes driven by Facebook (*H3*). This concludes that travel-related content that is consumed on Facebook does not influence destination selection. This confirms the outcome from the study by Cox *et al.* (2009), where it was concluded that social media was primarily used after selecting the holiday destination as the channel found to be less trustworthy than traditional sources. It is to be studied further if this outcome applies to all social media channels or is specific to Facebook.

In the SEM model shown in Figure 4, the period of travel has the highest effect of influencing destination selection, with 0.869 as its path coefficient. Three other individual constructs, namely travel group (0.851), safety and security (0.824) and passion/interest (0.845) are above 0.8, signifying the strong effect these variables have on influencing leisure travel destination selection.

H4 examines the influencing factor – itinerary planning – on the impact of behavioral changes Facebook had on leisure travel. Itinerary planning shows a strong influence (t-value $= 4.2826$, CI > 99 percent); thus, *H4* ($\beta = 0.3796$, $p < 0.01$) is accepted. Based on the outcome of Visa global travel study which learnt that Singapore residents book everything before making the travel, it can be concluded that Facebook powers this behavior by enabling itinerary planning and reducing the unknowns about a destination. This furthers the study by Xiang and Gretzel (2010) that social media ecosystem substantially contributes to the trip-planning process by establishing that Facebook, as a single channel, can contribute strongly to the trip-planning process.

In the SEM model shown in Figure 5, tourist attractions of a destination have the highest effect at an itinerary-planning stage with 0.919 as its path coefficient. Three other individual constructs,
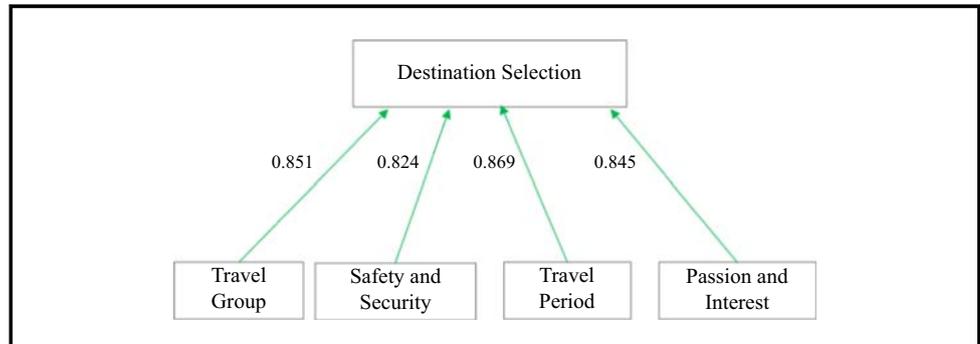
Table VI Outcomes of hypothesis testing

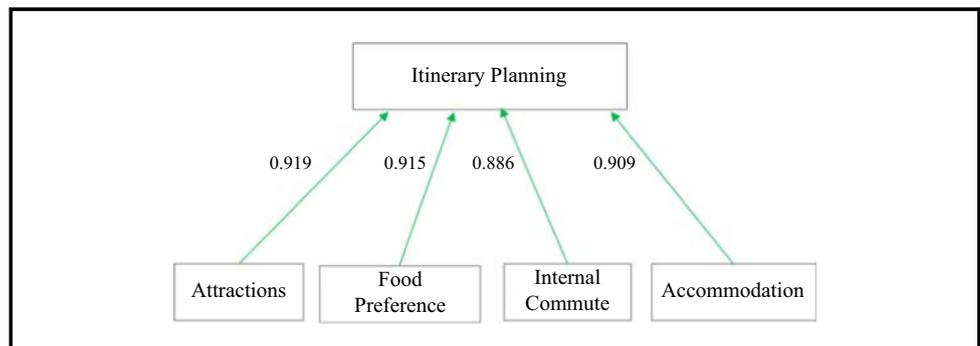| Effect	Original coefficient	Standard bootstrap results					Percentile bootstrap quantiles				Accepted
		Mean value	SE	t-value	p-value (2-sided)	p-value (1-sided)	0.0050	0.0250	0.9750	0.9950	
H1. There is a relationship between Facebook usage and frequency of leisure travel by Singapore residents	0.14	0.14	0.06	2.17	0.03	0.02	−0.02	0.02	0.27	0.30	Yes
H2. Destination selection is associated with the frequency at which Singapore residents travel for leisure	0.61	0.62	0.05	12.53	0.00	0.00	0.48	0.51	0.71	0.73	Yes
H3. Facebook consumption is related to the destination a Singapore resident selects for leisure travel	−0.01	0.00	0.07	−0.08	0.94	0.47	−0.17	−0.13	0.14	0.19	No
H4. Facebook usage has a relationship with itinerary planning, involving stay, food, commute and activities during the trip	0.38	0.38	0.09	4.28	0.00	0.00	0.15	0.20	0.55	0.60	Yes
H5. Destination selection for leisure travel is related to the itinerary planned by Singapore residents	0.54	0.55	0.08	7.26	0.00	0.00	0.35	0.39	0.68	0.71	Yes
H6. Experience sharing on Facebook is associated with leisure travel behavior of Singapore residents	0.44	0.43	0.09	5.13	0.00	0.00	0.22	0.26	0.60	0.64	Yes
H7. Sharing travel-related content on Facebook is related to the destination selected for travel	0.46	0.46	0.07	6.41	0.00	0.00	0.25	0.32	0.59	0.63	Yes

Figure 3 Factors influencing travel frequency and associated path coefficients

Frequency of Travel

0.849   0.888   0.857   0.902

Time   Affordability   Proximity   Network
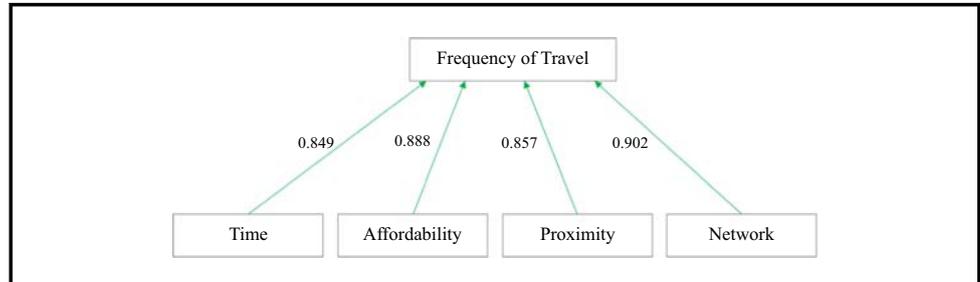
Figure 4 Factors influencing destination selection and associated path coefficients

Destination Selection

0.851   0.824   0.869   0.845

Travel Group   Safety and Security   Travel Period   Passion and Interest

Figure 5 Itinerary planning variables and associated path coefficients

Itinerary Planning

0.919   0.915   0.886   0.909

Attractions   Food Preference   Internal Commute   Accommodation

namely food preference (0.915), internal commute (0.886) and accommodation (0.909) are above 0.8, signifying the strong effect these variables have during the itinerary-planning phase.

H5 argued for the effects of destination selection in itinerary planning, producing a strong approval outcome for the relationship with a *t*-value of 7.2636 and 99 percent significance level, indicating the mix of comfort destinations in close proximity (especially South East Asia) and aspirational destinations, such as Japan and Europe, where elaborate itinerary planning is required. The results confirm the outcome from the Arsal *et al.* (2008) study, which states that travel review consumption is the common thread between early stages of destination selection and travel planning, all the way to deciding what to do at the destination.

H6 looked at experience sharing on Facebook and its impact on leisure travel behavior. This hypothesis passed with the 99 percent significance level (*t*-value = 5.132), confirming the strong relationship between the changes in leisure travel behavior and social sharing. Social sharing and staying relevant and visible within one's network becomes critical, and the approval of this

hypothesis validates the strong relationship between participation in a social travel group and perceived social benefits established by Wang and Fesenmaier (2004). This outcome also challenges findings by Cox *et al.* (2009) that social media use during and after the trip was very limited.

In the SEM model shown in Figure 6, available gadgets during travel have the highest effect on social sharing, with 0.888 as its path coefficient. Three other individual constructs, namely internet connectivity (0.865), extreme experience (0.811) and social stamp (0.837) are above 0.8, signifying the strong effect these variables have on social sharing.

The last hypothesis (*H7*) looked at the influencing factor social sharing to the destination selected for leisure travel by Singapore residents and concluded on a strong influence (*t*-value $= 6.4088$, CI > 99 percent), thus accepting the hypothesis. Based on the results from Rimé *et al.* (1992), which showed instant sharing behavior of extreme emotional experiences, one can conclude that destinations vary in terms of the experiences they can provide and the moments delivered that are "worth" sharing.

Given the gap in studies conducted specifically for Singapore residents and the influence Facebook has on their leisure travel behavior, the research findings are new and provide substantial insights for tourism and destination marketers and provide insights into how the marketers can participate in the travel-planning process by effectively using Facebook. The bootstrapped SEM shown in Figure 7 demonstrates path coefficient values that establish relationships between the dependent and independent variables under study.

Contributions

Impact of Facebook on travel behavior

Facebook is a strong influencer across all stages of travel planning. Social media and user-generated content, fronted by Facebook, are responsible for influencing critical decisions made pertaining to leisure travel. This study focuses on five aspects that Facebook delivers for travelers that have enabled the platform to gain popularity and thought leadership across all stages of travel planning.

Facebook enhancing travel satisfaction

Given the fact that Facebook eliminates uncertainties about the travel destination by providing information and real experiences and recommendations from other travelers, it helps travelers make informed decisions and plan trips that maximize satisfaction.

Facebook enhancing trust

In previous studies, trust is cited as one of the reasons why official travel information provided by the destination providers still plays an important role in forming decisions during the travel-planning process (Yoo *et al.*, 2009). While trust is a concern when we look at social media and user-generated content at an ecosystem level (Ayeh, 2015; Ayeh *et al.*, 2013),

Figure 6 Social-sharing factors and associated path coefficients
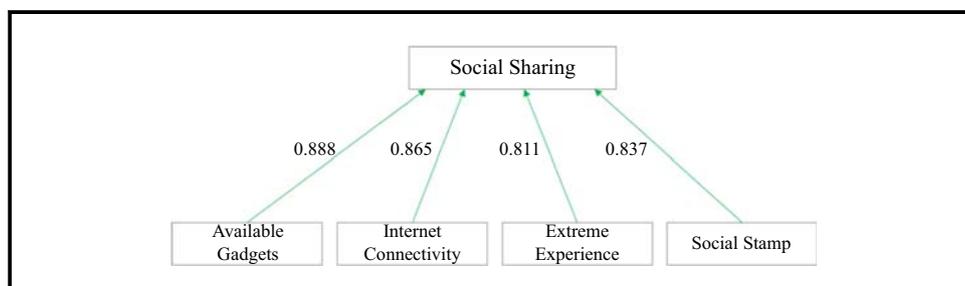
Figure 7 Structural modeling through bootstrapping
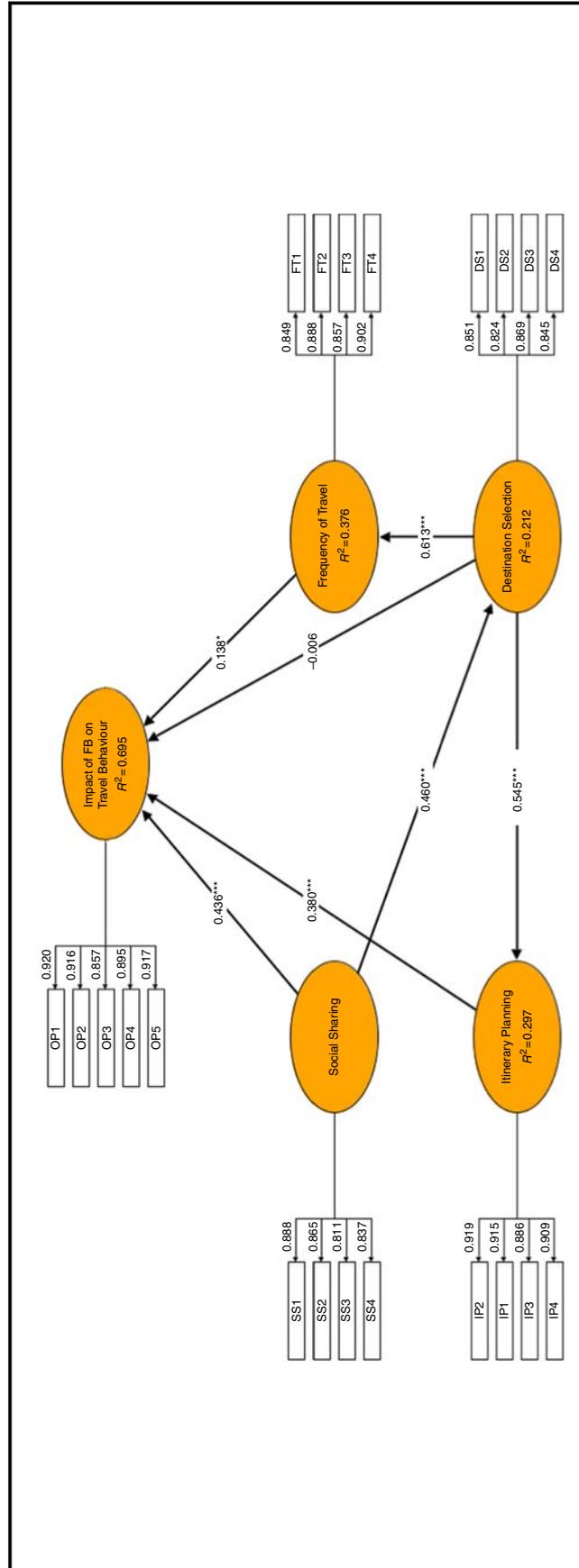
Facebook can claim to be an outlier with a provider of information that is only from the network of friends. Popular websites that are frequented during the travel-planning process, such as TripAdvisor, could face trust issues, as an unknown pool of travelers generates the content.

Facebook enhancing travel experience

By being the information platform that encapsulates the best experiences their network has had while at a destination, Facebook content forms a cheat sheet for travelers to maximize the experiences a destination can offer. Right from providing information about broad elements, such as places to stay, visit, eat or to shop while traveling, travel content on Facebook takes this up a notch by providing specific information (best driver, tour guide), which eliminates any uncertainty and optimizes the experience.

Facebook powering discovery

Given the high frequency of travel amongst Singapore residents, Facebook becomes the discovery engine for new destinations and experiences that are available out there. While the literature review on travel planning cites search engines and travel websites like TripAdvisor as the starting point of the planning process, these channels are visited by those who already have a high travel intent or have already made the decision to travel. Facebook, where travel information is consumed passively, is more often the first touching point, which seeds the idea of travel in a person's mind. Specific to the travel plans made, based on interest and passion, Facebook is a great discovery source, as your friend network would consist of like-minded people with shared interest.

Facebook leading to offline collaboration

When it comes to travel information, Facebook is often the first touch point. Since the information is shared within the network, the information consumed on Facebook leads to offline conversations and collaborations. Being an active user of Facebook means you are spotting travel-related content frequently, and since the travel intent is low during the consumption time, the action is taken offline once the decision is made to plan a trip.

In the SEM model shown in Figure 8, the path coefficient for all the constructs represents measures of the impact of Facebook on influencing leisure travel behavior. All five individual constructs have a path coefficient value greater than 0.8, which signifies that they all have a strong impact on the measured variable – Facebook's behavioral influence on leisure travel.

Answers to research questions

Does Facebook influence leisure travel behavior of Singapore residents?

Yes. The outcome of this research confirms the positive influence Facebook has on travel behavior of Singapore residents. The strongest relationship for Facebook usage is established in

Figure 8 Influence of Facebook on leisure travel behavior and path coefficients
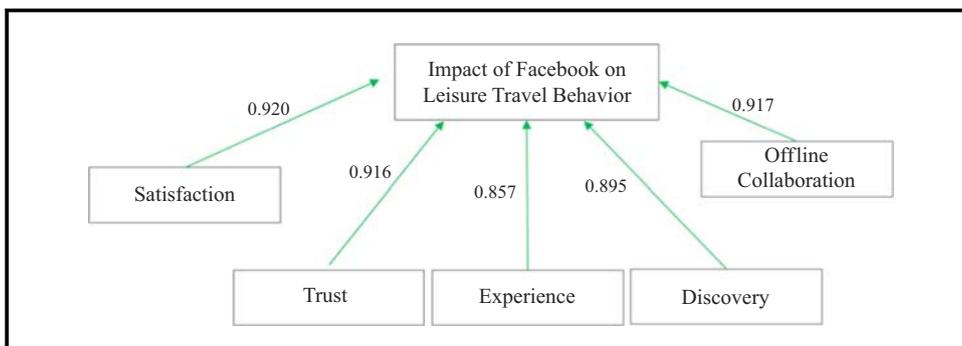
the way travelers from Singapore share travel-related experiences (0.436 path coefficient) for which they carry gadgets to capture their trip and seek internet connectivity to share extreme experiences and engage with their network on Facebook. Facebook also influenced itinerary planning (0.380 path coefficient), where the traveler considers options to stay, eat, commute and visit tourist attractions.

Does Facebook play a role in influencing behavior at all stages of the travel process?

No. This study suggests that Facebook does not have a significant influencing role when it comes to destination selection. With a path coefficient of −0.006, Facebook's influence is minimal when Singapore residents decide on a destination. However, the study establishes a strong significance (0.895 path coefficient) between destination discovery and Facebook usage, suggesting that the role played by Facebook when it comes to destination selection is passive, where it plays the role of seeding the idea when the travel intent is low/non-existent.

Has Facebook played a role in enhancing leisure travel experience?

Yes. With a path coefficient of 0.857, it can be concluded that Facebook has significantly enhanced the leisure travel experience of Singapore residents. With high levels of trust on Facebook content related to travel (path coefficient = 0.916) and an enabler to offline collaboration and engagement with friends who have traveled to the same destinations (path coefficient = 0.917), Singapore residents are highly satisfied with Facebook (path coefficient = 0.920) as a resource for travel-related information, thus enhancing the leisure travel experience.

Implication of travel behavior changes triggered by Facebook

The outcome of this research was meant for destination providers and tourism boards to effectively influence Singapore residents to visit their destination, engaging effectively with the audience right from the consideration phase through advocacy. Based on the validated hypotheses, destination providers can devise Facebook platform strategies to influence frequency by offering direct and cost-efficient flights, promotion rates, Group travel benefits, etc. Given the lack of influence Facebook has on destination selection, marketers can de-focus their efforts on Facebook to influence their decision and focus on other channels where it matters more. Itinerary planning showed a strong relationship with Facebook's influence on travel behavior, which means that it is a prime platform for pushing unique experiences that a traveler can enjoy once the decision is made to visit the destination. Destination providers must focus their effort on influencing social sharing by providing infrastructure, offering delightful and story-worthy experiences while a visitor is at his/her destination.

Given the high level of trust, satisfaction and experience Facebook can deliver to travelers, it is critical for destination providers to deploy and engage in sentiment-monitoring and conversation-tracking technologies, so as to plan and stay ahead.

From Facebook's perspective, the outcome of this study is helpful in recommending the best use of the platform for destination providers. Facebook advertising platform, widely used and evaluated by its ability to generate bookings, should be used as a trusted influencer tool for destination discovery and sharing.

Practical implications

The outcome of this research is meant for destination providers and tourism boards to effectively influence Singapore residents to visit their destination, engaging effectively with the audience right from the consideration phase through advocacy. Based on the validated hypotheses, destination providers can devise Facebook platform strategies to influence frequency by offering direct and cost-efficient flights, promotion rates, group travel benefits, etc. This research proves the impact it has on all aspects of travel planning, right from being the first touch point when the individual is at a passive state all the way through post-travel advocacy. Optimizing destination marketing on

Facebook is critical to influence decisions, while tracking Facebook conversations becomes the most valuable information source for discovering improvement areas and understanding the experience offered by a destination.

Limitations and future research

As shown by Yoo and Gretzel (2009), travelers' social media use and engagement is dependent upon nationality, culture, gender, age group, etc. Future research should focus on specific cohorts of customers while understanding social media behavior. Since this research was narrowly focused on Facebook, there is scope to understand how the social media ecosystem influences travel behavior of Singapore residents. Travel behavior is evolving and maturing, especially with the growth in tech-savvy, high-income demographics, which means a relook at the influence of social media will be required in the future. Facebook and social media usage is highly skewed toward mobile devices, which also opens up research opportunities to how mobile connectivity has powered social media's influence on travel behavior. The failed hypothesis in this study suggests that non-influence of Facebook during the destination-selection stage opens the question and warrants a study into what are the factors that influence destination selection by Singapore residents.

Conclusion

Facebook has now become a critical component to a Singapore resident's everyday life. The heavy influence it has across all spectrums of life, particularly around information-intensive activities such as travel, makes it a critical platform to consider. This research proves the impact it has on all aspects of travel planning, right from being the first touch point when the individual is at a passive state all the way through post-travel advocacy. Optimizing destination marketing on Facebook is critical to influence decisions, while tracking Facebook conversations becomes the most valuable information source for discovering improvement areas and understanding the experience offered by a destination. The relationship established in this research between Facebook and behavioral components such as Trust, Satisfaction and Experience makes it an ideal place to build brand affinity. The close correlation Facebook has with discovering new destinations makes it an excellent prospecting platform for upcoming destinations. In the last couple of years, mobile has been a major disruptor, the interaction of mobile usage and personal nature of travel has made proliferation of app more critical. The influence of web-based searching is decreasing with more use of mobile devices, i.e. using apps. It can be concluded that Facebook has a strong impact on leisure travel behavior of Singapore residents and is a prime platform on which destination marketers and tourism boards can capitalize.

References

Ajzen, I. (1991), "The theory of planned behavior", *Organizational Behavior and Human Decision Processes*, Vol. 50 No. 2, pp. 179-211.

Alegre, J. and Pou, L. (2006), *An Analysis of the Microeconomic Determinants of Travel Frequency*, Department of Applied Economics, Universitat de les Illes Balears, Palma, Illes Balears.

Arsal, I., Backman, S. and Baldwin, E. (2008), "Influence of an online travel community on travel decisions", in O'Connor, P., Höpken, W. and Gretzel, U. (Eds), *Information and Communication Technologies in Tourism*, Springer Verlag, Vienna, pp. 82-93.

Ashworth, G.J. (1989), "Urban tourism: an imbalance in attention", in Cooper, C. (Ed.), *Progress in Tourism, Recreation and Hospitality Management*, Vol. 1, Belhaven, London, pp. 33-54.

Ashworth, G.J. (2003), "Urban tourism: still an imbalance in attention?", in Cooper, C. (Ed.), *Classic Reviews in Tourism*, Channel View, Clevedon, pp. 143-63.

Ayeh, J.K. (2015), "Travellers' acceptance of consumer-generated media: an integrated model of technology acceptance and source credibility theories", *Computers in Human Behavior*, Vol. 48, pp. 173-80, available at: https://doi.org/10.1016/j.chb.2014.12.049

Ayeh, J.K., Au, N. and Law, R. (2013), "Predicting the intention to use consumer-generated media for travel planning", *Tourism Management*, Vol. 35, pp. 132-43, available at: http://hdl.handle.net/10397/21899

Bac, D.P., Bugnar, N.G. and Mester, L.E. (2015), "Terrorism and its impacts on the tourism industry", *Revista Romana de Geografie Politica*, Vol. 17 No. 1, pp. 5-11.

Baker, K. and Coulter, A. (2007), "Terrorism and tourism: the vulnerability of beach vendors' livelihoods in Bali", *Journal of Sustainable Tourism*, Vol. 15 No. 3, pp. 249-66.

Baron, R.R.V. (1975), *Seasonality in Tourism: A Guide to the Analysis of Seasonality and Trends for Policy Making*, Economist Intelligence Unit, London.

Buhalis, D. (1998), "Strategic use of information technologies in the tourism industry", *Tourism Management*, Vol. 19 No. 5, pp. 409-21.

Butler, R.W. (2001), "Seasonality in tourism: issues and implications", *A volume in Advances in Tourism Research*, pp. 5-21, available at: https://doi.org/10.1016/B978-0-08-043674-6.50005-2

Chen, A. and Karahanna, E. (2014), "Boundaryless technology: understanding the effects of technology-mediated interruptions across the boundaries between work and personal life. AIS Transactions on", *Human-Computer Interaction*, Vol. 6 No. 2, pp. 16-36.

Chen, Y.C., Shang, R.A. and Li, M.J. (2014), "The effects of perceived relevance of travel blogs' content on the behavioral intention to visit a tourist destination", *Computers in Human Behavior*, Vol. 30, pp. 787-99, doi: 10.1016/j.chb.2013.05.019.

Cox, C., Burgess, S., Sellitto, C. and Buultjens, J. (2009), "The role of user-generated content in tourists' travel planning behavior", *Journal of Hospitality Marketing & Management*, Vol. 18 No. 8, pp. 743-64.

Cruwys, T., Bevelander, K.E. and Hermans, R.C. (2015), "Social modeling of eating: a review of when and why social influence affects food intake and choice", *Appetite*, Vol. 86, pp. 3-18, doi: 10.1016/j.appet.2014.08.035.

Dijkstra, T.K. and Henseler, J. (2015), "Consistent partial least squares path modeling", *MIS Quarterly*, Vol. 39 No. 2, pp. 297-316.

Dredge, D. and Jenkins, J. (2003), "Destination place identity and regional tourism policy", *Tourism Geographies*, Vol. 5 No. 4, pp. 383-407.

Edwards, D., Griffin, T. and Hayllar, B. (2008), "Urban tourism research: developing an agenda", *Annals of Tourism Research*, Vol. 35 No. 4, pp. 1032-52.

Fotis, J., Buhalis, D. and Rossides, N. (2012), *Social Media Use and Impact During the Holiday Travel Planning Process*, Springer-Verlag, Wien, pp. 13-24.

Glaesser, D. (2006), *Crisis Management in the Tourism Industry*, Routledge, Burlington, MA.

Glenn, S.S. (2004), "Individual behavior, culture, and social change", *The Behavior Analyst*, Vol. 27 No. 2, pp. 133-51.

Gretzel, U. and Yoo, K.H. (2008), "Use and impact of online travel reviews", in O'Connor, P., Höpken, W. and Gretzel, U. (Eds), *Information and Communication Technologies in Tourism*, Springer-Verlag Wien, Vienna, pp. 35-46.

Hays, S., Page, S.J. and Buhalis, D. (2013), "Social media as a destination marketing tool: its use by national tourism organisations", *Current Issues in Tourism*, Vol. 16 No. 3, pp. 211-39.

Henseler, J., Fassott, G., Dijkstra, T.K. and Wilson, B. (2012), "Analysing quadratic effects of formative constructs by means of variance-based structural equation modelling", *European Journal of Information Systems*, Vol. 21 No. 1, pp. 99-112, doi: 10.1057/ejis.2011.36.

Hudson, S. and Thal, K. (2013), "The impact of social media on the consumer decision process: implications for tourism marketing", *Journal of Travel & Tourism Marketing*, Vol. 30 Nos 1/2, pp. 156-60.

Jenkins, O. (2003), "Photography and travel brochures: the circle of representation", *Tourism Geographies*, Vol. 5 No. 3, pp. 305-28.

Josiam, B.M., Smeaton, G. and Clements, C.J. (1999), "Involvement: travel motivation and destination selection", *Journal of Vacation Marketing*, Vol. 5 No. 2, pp. 167-75.

Kang, M. and Schuett, M.A. (2013), "Determinants of sharing travel experiences in social media", *Journal of Travel & Tourism Marketing*, Vol. 30 Nos 1/2, pp. 93-107.

Kroesen, M. and Handy, S. (2014), "The influence of holiday-taking on affect and contentment", *Annals of Tourism Research*, Vol. 45, pp. 89-101.

Lohmann, M. and Kaim, E. (1999), "Weather and holiday destination preferences image, attitude and experience", *The Tourist Review*, Vol. 54 No. 2, pp. 54-64.

Mamaghani, F. (2009), "Impact of e-commerce on travel and tourism: an historical analysis", *International Journal of Management*, Vol. 26 No. 3, pp. 365-75.

Mieczkowski, Z. (1985), "The tourism climatic index: a method of evaluating world climates for tourism", *The Canadian Geographer (Le Géographe Canadien)*, Vol. 29 No. 3, pp. 220-33.

Munar, A.M. and Jacobsen, J.K.S. (2014), "Motivations for sharing tourism experiences through social media", *Tourism Management*, Vol. 43, pp. 46-54.

Page, S.J. (1995), *Urban Tourism*, Routledge, London.

Pearce, D.G. (2001), "An integrative framework for urban tourism research", *Annals of Tourism Research*, Vol. 28 No. 4, pp. 926-46.

Poon, A. (1993), *Tourism, Technology and Competitive Strategies*, CAB international, New York, NY.

Prahalad, C.K. and Ramaswamy, V. (2004), "Co-creation experiences: the next practice in value creation", *Journal of Interactive Marketing*, Vol. 18 No. 3, pp. 5-14.

Rimé, B., Philippot, P., Boca, S. and Mesquita, B. (1992), "Long-lasting cognitive and social consequences of emotion: social sharing and rumination", *European review of social psychology*, Vol. 3 No. 1, pp. 225-58.

Rimé, B., Finkenauer, C., Luminet, O., Zech, E. and Philippot, P. (1998), "Social sharing of emotion: new evidence and new questions", *European Review of Social Psychology*, Vol. 9 No. 1, pp. 145-89.

Rudihartmann (1986), "Tourism, seasonality and social change", *Leisure Studies*, Vol. 5 No. 1, pp. 25-33.

Saini, R. and Monga, A. (2008), "How I decide depends on what I spend: use of heuristics is greater for time than for money", *Journal of Consumer Research*, Vol. 34 No. 6, pp. 914-22.

Um, S. and Crompton, J.L. (1992), "The roles of perceived inhibitors and facilitators in pleasure travel destination decisions", *Journal of Travel Research*, Vol. 30 No. 3, pp. 18-25.

Visa's Global Travel Intentions Study (2015), available at: www.visa.com.sg/aboutvisa/mediacenter/NR_SGP_270815.html (accessed April 15, 2017).

Wang, S., Kirillova, K. and Lehto, X. (2016), "Travelers' food experience sharing on social network sites", *Journal of Travel & Tourism Marketing*, pp. 1-14, doi: 10.1080/10548408.2016.1224751.

Wang, Y., Yu, Q. and Fesenmaier, D.R. (2002), "Defining the virtual tourist community: implications for tourism marketing", *Tourism Management*, Vol. 23 No. 4, pp. 407-17.

Wang, Y.C. and Fesenmaier, D.R. (2004), "Modeling participation in an online travel community", *Journal of Travel Research*, Vol. 42 No. 3, pp. 261-70.

Xiang, Z. and Gretzel, U. (2010), "Role of social media in online travel information search", *Tourism Management*, Vol. 31 No. 2, pp. 179-88.

Ye, Q., Law, R., Gu, B. and Chen, W. (2011), "The influence of user-generated content on traveler behavior: an empirical investigation on the effects of e-word-of-mouth to hotel online bookings", *Computers in Human Behavior*, Vol. 27 No. 2, pp. 634-9.

Yoo, K.-H. and Gretzel, U. (2009), "Generational differences in CGM perceptions and use for travel planning", *Proceedings of the 40th Annual Conference of the Travel and Tourism Research Association*, *Honolulu, HI*.

Yoo, K.H., Lee, Y., Gretzel, U. and Fesenmaier, D.R. (2009), "Trust in travel-related consumer generated media", in Höpken, W., Gretzel, U. and Law, R. (Eds), *Information and Communication Technologies in Tourism*, pp. 49-59.

Yu, C.C. and Chang, H.P. (2009), "Personalized location-based recommendation services for tour planning in mobile tourism applications", *International Conference on Electronic Commerce and Web Technologies, Springer*, *Berlin and Heidelberg*, September, pp. 38-49.

Further reading

Cirillo, C., Diana, M. and Dong, H. (2015), "Time spent on social media and its impact on travel behaviours and activity participation: preliminary results from a comparative study based on association analysis and discrete choice models", *Fourteenth International Conference on Travel Behaviour Research*, *Windsor*.

Montano, D.E. and Kasprzyk, D. (2015), "Theory of reasoned action, theory of planned behavior, and the integrated behavioral model", in Glanz, K., Rimer, B.K. and Lewis, F.M. (Eds), *Health Behavior: Theory, Research and Practice*, Jossey-Bass, San Francisco, pp. 67-98.

Sopexa (2015), "Survey results", available at: www.adweek.com/digital/facebook-beats-pinterest-foodies-go-social-platform-166652/ (accessed April 11, 2017).

Statistia (2016), "Q4 report on Singapore social network penetration", available at: www.statista.com/statistics/284466/singapore-social-network-penetration/ (accessed April 10, 2017).

Tham, A., Croy, G. and Mair, J. (2013), "Social media in destination choice: distinctive electronic word-of-mouth dimensions", *Journal of Travel & Tourism Marketing*, Vol. 30 Nos 1/2, pp. 144-55.

Wise, N. (2016), "Outlining triple bottom line contexts in urban tourism regeneration", *Cities*, Vol. 53, pp. 30-4.

Corresponding author

Krishna Moorthy can be contacted at: krishnam@utar.edu.my