

Influence of Wi-Fi service quality towards tourists' satisfaction and dissemination of tourism experience

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Abstract

Despite the heavy reliance on Wireless Fidelity (Wi-Fi) among tourists', and the increase number of hotspots available at tourist attractions, limited research is available that investigates the service quality of Wi-Fi. This study investigated the dimension of service quality (SERVQUAL), Technology Acceptance Model (TAM) perceived ease of use and perceived usefulness, and their relationships with tourists' satisfaction and tourism experience with Wi-Fi technology at tourists' attractions. The results indicated that perceived ease of use, perceived usefulness, and service quality significantly linked with tourists' satisfaction. We also found a significant effect of service quality on tourist experience. Implications of these results suggest that the key attributes need to be investigated to better understand the tourist satisfaction on the service quality assessments. Hence, the destination managers should consider upgrading Wi-Fi services as well as maintaining quality WI-FI services to enhance tourists' experience at tourist attractions.

Keywords:

Wi-Fi, satisfaction, tourism, experience, service quality, Technology Acceptance Model

1 Introduction

Technology has dramatically changed tourists' travel behaviours. The role of technology in tourism continues its long-standing expansion and becomes increasingly important to tourists. Tourists rely on the Internet to search for travel information, communicate with friends and sharing status updates on social media (Ahmed, 1991). Hence, Wi-Fi connections can easily be found in many tourist attractions to provide tourists' comfort and easy access to information. Major tourism cities, such as New York City, provide free Wi-Fi services at most of its attractions (White, 2015). In addition, In London for instance, 31 percent of international tourists' regard access to Wi-Fi in popular tourist spots is second most desired comfort while on holiday. Not only that, developed cities like Japan has started to provide the free Wi-Fi service via card specifically for foreigners which can be access throughout various attractions in Tokyo.

The above scenario illustrated how important this technology to people especially tourists' to be able to have an enjoyable and comfortable trip by using Wi-Fi services. Meanwhile, in Kuala Lumpur, free Wi-Fi is available at major shopping malls and public transportation facilities. This free service can boost tourists' satisfaction toward an attraction (Parasuraman & Colby, 2015). In addition, (Connolly, Caulfield, & O'Mahony, 2009), Connolly et al. (2009) who surveyed Irish railway passengers indicating that they would use the public transport more often if free Wi-Fi was available. Also, prior studies have indicated that modern customers especially travellers demand more high quality of service, product, information and value for their money (Christian, 2001). To cope with these challenges, destination management organizations (DMOs) need to consider the importance of technology as a must have services to offer.

Nevertheless, limited studies have explored the quality of Wi-Fi services and tourists' experience with using Wi-Fi, especially in Malaysia. It is essential to investigate the relationship of tourists' satisfaction and the quality of Wi-Fi services. Satisfaction is one of the most researched topics in tourism because understanding the visitors' satisfaction is a vital element in the survival of any tourist attractions (Gursoy, McCleary, & Lepsito, 2003; Neal & Gursoy, 2008), and it also plays a significant role in tourist decisions to recommend a place to others and revisit the sites (Kozak & Rimmington, 2000).

Tourist satisfaction is described as the visitors' emotion after they experience a tour (Baker & Crompton, 2000) and was previously measured by ease of use and usefulness of the technology (Davis & Venkatesh, 1996). Davis (1989) described perceived usefulness as the expectations a user has when faced with technology; and perceived ease of use as the functionality of the system. As long as users think that it is easy to use the system, they will have a positive attitude towards it, and will affect their behaviour. Thus, the perceptions of ease of use and the usefulness were key determinants of a user's attitude to using a technology (Kim, Park, & Morrison, 2008). Attitude in turn will positively affect a consumer's intention to use technology.

The technology service quality also plays a role in tourist satisfaction. Parasuraman, Zeithaml, and Berry (1985) defined service quality as the evaluation or attitude of overall excellence of services. Further, Chen and Chen (2010) stated service quality is the extent to which the services provided at the travel site satisfy tourist needs and expectations. This study also examined the dissemination of tourist experience. Laws (1995) described dissemination of experience as tourists' experiences with destinations, and their perceptions are influenced by comparisons among facilities, attractions, and service standards. In addition, it was proposed that service quality served as the base for tourists' experience with the destinations. According to Crompton and Love (1995), tourists shape and create the recreation experience and their satisfaction. Naturally, tourists have their initial expectations of what they would experience at a destination based on various sources of information that they gain. Then, their satisfaction is dependent on how well their expectations are met at the destination. In sum, a satisfaction is the function of pre-travel expectations and post-travel experiences (Chen & Chen, 2010).

2 Literature Review

2.1 Service quality of Wi-Fi

Parasuraman et al. (1985) defined service quality as the overall evaluation or attitude of overall excellence of services. In addition, Chuang, Chen & Chen, (2010) stated that service quality is the extent to which the services provided at the travel site satisfy tourist needs and expectations. It is the difference between the customer's subjective judgments regarding how much expectations and perceptions conform. Quality service is the conformity to expectations or exceeding tourist expectations and needs (Lin, 2008).

According to Cronin and Taylor (1992), one of the most complex actions concerns is how to assess service quality in a proper and accurate way. Based on the numerous considerable published works on the service quality field all over the world there are some lacks consensus between the managers and marketing researchers concerning the real meaning of service quality (Freitas & Costa, 2012). The only existent consensus is that service quality is still an elusive and abstract construct that is difficult to define and measure (Parasuraman et. al., 1985, 1988; Carman, 1990; Cronin & Taylor, 1992). There are literature review reveals that there are many authors who believe that there is a casual relationship between service quality and satisfaction in which service quality affects future customer intentions to purchase those particular services (Hurley & Estelami, 1998). So that service quality is difference between customer's expectation and perception of services delivered by service firms.

There are important questions should be highlighted in measuring the service quality which is why should service quality be measured. Measurement allows for comparison before and after changes, for the location of quality related problems and for the establishment of clear standards for service delivery. This clearly important to

study the several of satisfaction among tourist since quality of the technology especially in wireless technology is rarely study in the concept of hospitality. Supporting this measurement, Edvardsen et al. (1994) stated in their experience, analysis and measurement is the starting point in developing the quality of service.

2.2 Service quality (SERVQUAL)

In order to measure the satisfaction of tourists, SERVQUAL, an instrument developed by Parasuraman et al. (1985) is often used by researchers to measure the tangible and intangible service elements. SERVQUAL investigates the gaps between what are the supplier offers and what are the tourists' expectations. Five dimensions namely tangible, reliability, responsiveness, assurance and empathy in SERVQUAL are used to investigate tourists' perceptions of a service quality and their satisfaction with various tourism services (Akama & Kieti, 2003). SERVQUAL has also been used to examine satisfaction due to the similarities in which the two concepts are conceptualized and operationalized (Baker & Crompton, 2000; Crompton & Love, 1995; Lee, Graefe, & Burns, 2004). However, there are some researchers argue that the two concepts are different in which the service quality being based on the level of standards for service attributes, while satisfaction is being based on the level of customers perceptions of the experience (Crompton & Love, 1995).

In the context of natural settings, Lee, Graefe and Burns (2004) explain that service quality could be the evaluation of toilet or campground facilities, but satisfaction would be influenced by the weather, social interactions, but also by the quality of the natural setting facilities. Thus, the researchers have found that satisfaction is a more subjective evaluation than service quality. If service providers can improve the quality of their services, tourists' satisfaction is outside of the provider's control (Crompton & MacKay, 1989; Crompton & Love, 1995). However, Baker and Crompton (2000) have argued that by stating "higher quality performance in facility provision, programming, and service are likely to result in higher level of visitor satisfaction". Thus, quality refers to the quality of the elements of a tourism product, whereas satisfaction refers to the quality of a visitor's experience, which is dependent on how tourists interact and react to the tourism product attributes. This situation has led Parasuraman et al. (1994) to revise their earlier notion of satisfaction by suggesting the definition to "a customer's overall satisfaction with a transaction [is] ...a function of his or her assessment of service quality, product quality, and price. This conceptualization is then consistent with the 'quality leads to satisfaction' school of thought".

2.3 Technology Acceptance Model (TAM)

Technology Acceptance Model (TAM) was developed by Davis (1989) based on the Theory of Reasoned Action (TRA) (Fishbein & Ajzen, 1975) that looks into user acceptance of technology use as well as learning processes (Davis, 1989; Venkatesh & Davies, 2000). This model emphasizes surveying individual attitudes toward information technology, and has been widely employed in many significant studies of user attitudes (Liaw & Huang, 2003; Liaw, Huang & Chen, 2007). Importantly, in TAM, two beliefs that

focused on information system acceptance which are “Perceived Usefulness” (PU) and “Perceived Ease of Use” (PEOU) are vital in understanding the learner’s attitudes that can effectively help expand system functions and meet learner’s needs.

In the context of Wi-Fi technologies, Lu, Yu, Liu & Yao (2003) proposed an extended Technology Acceptance Model to study the adoption of wireless Internet using mobile devices. On the other hand, Kim, Park and Morrison (2008) found that TAM provided a better understanding of traveller’s acceptance of this technology, suggesting that PU and PEOU were key elements influencing traveller’s attitudes and intentions to use mobile devices in the trip decision making process as well as their experience. PU is the degree to which a user believes a specific system could increase users abilities in undertaking a particular task, and the main point of PU is expectations a user has when faced with a piece of technology (Davis, 1989, p. 320). As long as the user thinks the system might help in some way, the attitudes the user expresses will be positive. When intention to use was designated as the dependent variable, PU was studied 10 times and was found to be significant nine times (Jeyaraj, Rottman & Lacity, 2006). The study of this construct can be a guideline for researcher in order to know the significant of it.

Meanwhile, PEOU is being defined as the degree to which a user thinks a specific system is easy to operate, and the point of PEOU is the functionality of the system (Davis, 1989). As long as users think that it is easy to use the system, they will have a positive attitude towards it, and this will affect their behaviour. Thus, the perceptions of ease of use and the usefulness were considered to be key determinants of a user’s attitude to using a technology. Attitude in turn will positively affect a consumer’s intention to use technology. TAM also predict that beliefs or attitudes about perceived usefulness (PU) determine intention use (IU) the technology which, then, leads to actual usage (Venkatesh & Davis, 2000). When intention to use a system was the dependent variable, PEOU was examined 13 times and found to be significant 8 times (Jeyaraj et al., 2006).

2.4 Tourists’ Satisfaction

The complexity and controversial nature of the definition and measurement of consumer satisfaction is well recognized by researchers (Chan & Baum, 2007). Definitions of satisfaction have varied amongst researchers. Based on Yuksel and Yuksel (2001), they stated that satisfaction is the cognitive or emotional response resulting from the consumption experience, or a comparison of benefits and costs to anticipated consequences. There is further debate made on the definition which stimulated by suggestions that satisfaction should be defined to reflect the connection between the cognitive and emotional processes involved (Oliver, 1997). This is because the subjective judgements tourists make about their travel experiences are associated with their emotions towards the vacation attributes and experiences, tourist’s satisfaction could therefore be determined by their emotional assessment. Thus, consumer satisfaction can be defined as a cognitive-affective state resulting from cognitive evaluations, as well as from emotions these evaluations evoke.

The approach to understanding satisfaction follows the leisure sciences approach which advocates that satisfaction is a psychological outcome, and that “intervening variables exist between level of service quality and level of satisfaction that are outside a service provider’s control” (Crompton & Love, 1995). Thus, this mean those tourists inevitably will shape and create the recreation experience and their satisfaction. Satisfaction is therefore can be defined as a fulfilment response, a judgement that the product and services provided have led to a pleasurable or unpleasurable experience, a cognitive-affective state derived from a tourist experience (del Bosque & San Martin, 2008).

Thus, regarding the measurement of satisfaction, Kozak and Rimmington (2000) note that originally, in marketing, satisfaction studies followed either the expectation-perception gap model developed by Parasuraman, Zeithaml and Berry (1985), or the performance-only approach developed by Gronroos (1990). The expectation-perception model or expectancy-disconfirmation paradigm considers consumer satisfaction or dissatisfaction to be a function of the disconfirmation arising from discrepancies between prior expectations and actual performance (Chen & Chen, 2010; del Bosque & San Martin, 2008). Thus, it is based on the belief that consumers develop expectations about a product or a service before consumption, however, post-consumption will make them to compare the actual experience with their original expectations and a disconfirmation occurs when either actual performance is better than expectations (resulting in high levels of satisfaction) or when perception of the performance is below expectations (low levels of satisfaction). Meanwhile, a confirmation will occur when actual performance matches prior expectations, the perceived experience resulting to be just satisfactory (Hui, Wan & Ho, 2007).

According to Heung and Cheng (2000), expectations are perceived likelihoods that a product or an experience has certain characteristics or it will lead to a particular outcome. Basically, tourists have their initial expectations of what they would experience at a destination based on various sources of information that they gain. Then, their satisfaction is then dependent on how well their expectations are met at the destination. Dissatisfaction wills occurs when performance their expected are differs from what was being expected. However, in the context of tourism, a satisfaction is the function of pre-travel expectations and post-travel experiences” (Chen & Chen, 2010).

Meanwhile, Kotler (2000) defined customer satisfaction as a person’s feeling of pleasure or disappointment that will lead comparing a product’s perceived performance in relation to his or her expectation. In measure the satisfaction, there is a need to collect the outcome of perception, evaluate the experience with the services provided from the service provider. Oliver (1997) claims that when tourists experience service attributes of high quality, they are likely to experience higher levels of satisfaction with the service. On the other hand, if a customer was to experience any service quality which is lower than expected, then the satisfaction level will drop.

Evaluating a technology service (i.e., Wi-Fi) and users’ attitude toward the technology, this study used the basis of TAM (Venkatesh & Davis, 2000; Davis et al.,

1989) as well as Parasuraman et al. (1985) studies as the theoretical framework. Figure 1 displays the research model.

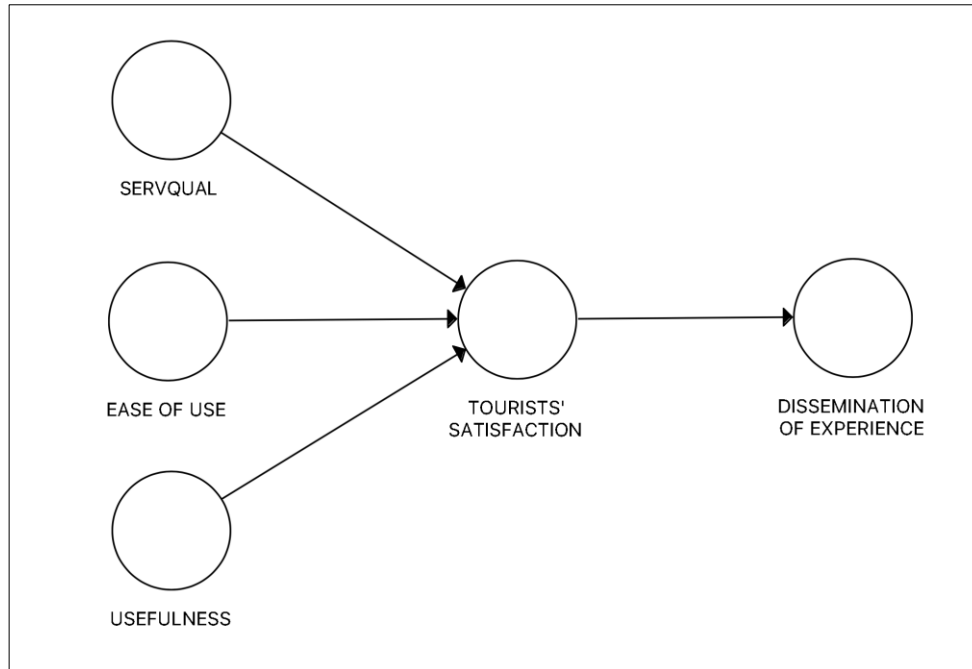


Figure 1: Research model

3 Methodology

3.1 Research Methodology

To investigate the influence of the dimension of service quality (SERVQUAL), TAM's perceived ease of use and perceived usefulness, and their relationships with tourists' satisfaction and tourism experience with Wi-Fi technology at tourists' attractions, this research gathered data by surveying local and international tourists visiting several tourists' attractions in Kuala Lumpur. The study used purposive sampling method in order to target a specific population of interest (i.e., local and international tourists' travelling/sight-seeing within the central region route of Kuala Lumpur, Malaysia). The route comprised of major tourist attractions in the city included National Museum, KL Sentral, Royal Palace, Kuala Lumpur Bird Park, Dataran Merdeka, Kuala Lumpur City Centre (KLCC), Malaysia Tourism Centre (MATIC), KL Tower and Golden Triangle or Bukit Bintang.

Kuala Lumpur is a major tourism city in Malaysia where there's many tourists' attractions, public facilities, and restaurants offering free Wi-Fi services. Therefore, it was easy to locate both local and international tourists throughout the city using the Wi-Fi services. The whole data collection process was carried out within 3 weeks from 31 October 2016 to 15 November 2016. The data were collected by distributing both paper

based surveys as well as online survey questionnaire via Qualtrics software. The paper based surveys were placed at several tourists' attractions while the researcher distributed the online questionnaire by approaching tourists' using iPads. The respondents were guided and assisted while responding to the survey to ensure more understanding in answering each of the questions. The questionnaire was developed by adapting established questionnaire developed by Parasuraman, Zeithaml, and Berry (1985) and Davis, Bagozzi, and Warshaw (1989). A total of 514 questionnaires were distributed throughout the data collection period of the study. Out of the 514, only 397 questionnaires were used.

The study analyzed the data using SmartPLS 3.0 for PLS-SEM model evaluation. PLS-SEM allows for indirect effect estimation unlike the multiple regression. Hence, PLS-SEM is suitable for our model estimation because it was hypothesized that there was an indirect effect of service quality dimensions on tourists' satisfaction and dissemination of experience when using Wi-Fi when traveling. The measurement model in PLS is assessed in terms of item loadings and reliability coefficients (composite reliability), as well as the convergent and discriminant validity. The structural model in PLS is evaluated by examining the path coefficients, *T* statistics and *R*².

4 Findings

4.1 Respondent profiles

A total of 397 respondents participated in this research. The data were collected by distributing the online survey questionnaire. The survey respondents consisted of 58.9% (*n* = 234) female, 84.9% (*n* = 337) were between 18 to 39 years of age, 51.9% (*n*=206) of the respondents were married, and a majority of them 72.3% (*n* = 287) were degree holder. The highest percentage of tourists in this study was from the Asia continent, 76.54% (*n* = 303) followed by 8.7 % (*n* = 34) from Europe region, 8.1% (*n* = 32) from the Australasian region (Australia and New Zealand), 4.8% (*n* = 19) American continent and 2.3% (*n* = 19) Africa region. The respondents reported their average length of stayed are between 4-6 nights.

4.2 Data analysis

PLS-SEM was used to analysed the data. The measurement model in PLS-SEM is assessed in terms of item loadings and reliability coefficients (composite reliability), as well as the convergence and discriminant validity. Individual item loadings greater than .70 or greater is considered acceptable (Chin, 2010). Interpreted like a Cronbach's alpha for internal consistency reliability estimate, a composite reliability of .70 or greater is considered acceptable (Chin, 2010). The average variance extracted (AVE) measures the variance captured by the indicators relative to measurement error, and it should be greater than .50 to justify using a construct (McIntosh, 2014). than .50 to justify using a construct (Barclay, Thompson, & Higgins, 1995). The discriminant validity of the measures was assessed by examining the correlations between the measures of

potentially overlapping constructs. Items should load more strongly on their own constructs in the model, and the average variance shared between each construct and its measures should be greater than the variance shared between the construct and other constructs (Compeau, Higgins, & Huff, 1999). The structural model in PLS is assessed by examining the path coefficients (standardized betas). T statistics are also calculated to assess the significance of these path coefficients. In addition, R^2 is used as an indicator of the overall predictive strength of the model.

4.3 Measurement model

The results show that the measures of the constructs examined are strong in terms of item loadings, good in internal consistency reliability, and fulfilled the discriminant validity. All item loadings were above the suggested 0.70 (See Table 1). The internal reliabilities, assessed by composite reliability, were all greater than 0.70 (see Table 2).

Table 1: Measurement model: item loadings

	DE	PEOU	SQ	TS	PU
1. Wi-Fi services provided are reliable			0.815		
2. Wi-Fi services provided are well -operated			0.847		
3. Wi-Fi services provided are consistent			0.806		
4. Wi-Fi services provided perform without errors			0.830		
5. Providing Free Wi-Fi services indicates that tourist attraction management are sensitive to tourist needs and wants.			0.778		
6. Provide free Wi-Fi services indicates that tourist are able to connect to others world.			0.722		
7. Provide free Wi-Fi services indicates that tourist able to promote this city tourist attractions to others.			0.717		
8. I feel secured when I used WIFI services provided.			0.854		
9. It creates trust to me when I used Wi-Fi services provided.			0.778		
10. I feel secured when I do online business transaction using the Wi-Fi services provided.			0.764		
11. I feel safe when downloading any apps or games using the Wi-Fi			0.754		
12. Wi-Fi I services are available at convenient hours to me.			0.750		
13. Wi-Fi services provided are accessible			0.790		
14. Wi-Fi services provided have the good Internet speed			0.783		
15. I felt easy with free Wi-Fi services provided.		0.731			
16. I felt there is no obstacle of using the free Wi-Fi services.		0.816			

17. My interaction with Wi-Fi services provided are clear and understandable.	0.861	
18. I felt it is flexible to interact with other people by using the Wi-Fi service provided.	0.708	
19. I felt that Wi-Fi services provided are easy to use.	0.824	
20. I felt it is more quickly to accomplish my task with free Wi-Fi services provided		0.736
21. I felt my job performance improve with free Wi-Fi services provided.		0.711
22. I felt my job productivity increase with free Wi-Fi services provided.		0.813
23. I felt my effectiveness on the job enhance with free Wi-Fi services provided.		0.860
24. I felt my job become easier with free Wi-Fi services provided		0.896
25. I felt Wi-Fi services provided are useful in my job		0.896
26. Availability of Wi-Fi services is very useful		0.726
27. I felt secured when using Wi-Fi services		0.767
28. Wi-Fi services provided are easy to use in any time		0.785
29. Wi-Fi services provided are reliable and well operated		0.746
30. Wi-Fi services provided are consistent and without error		0.752
31. I can search the information that I need at any time anywhere with the Wi-Fi provided		0.759
32. There is no obstacle of using free Wi-Fi services		0.711
33. I will to say positive things about the Wi-Fi services to other people	0.869	
34. I plan to encourage friends and relatives to use the Wi-Fi services	0.854	
35. I plan to write reviews of WIFI services on travel blog or website	0.838	
36. I plan to update status on social media platforms about my experience of using Wi-Fi services	0.776	
37. I will give my suggestion to the authorities if there are any problem to the WIFI services in order to increase the Wi-Fi performance	0.823	

Table 2 also demonstrates satisfactory convergent and discriminant validity of the measures. Average variance extracted (AVE) for all constructs exceeded 0.50. As for the discriminant validity, Table 2 shows that all constructs were more strongly correlated

with their own measures than with any of the other constructs. Therefore, discriminant validity was observed.

Table 2: Reliability, convergence and discriminant validity coefficients

	CR	AVE	1	2	3	4	5
Dissemination of Experience	.919	.693	.833				
Ease of Use	.892	.624	.659	.790			
SERVQUAL	.958	.618	.804	.640	.786		
Tourists' Satisfaction	.898	.557	.678	.720	.754	.746	
Usefulness	.925	.676	.759	.614	.701	.634	.822

4.4 Structural model

The path coefficients from the PLS analysis are shown in Figure 2. All hypotheses were supported. All three of the independent variables (SERVQUAL, Ease of Use, and Usefulness) demonstrated a direct, statistically significant, and positive effect on Tourists' Satisfaction ($p < .001$). Tourists' Satisfaction also showed a strong positive link with Dissemination of Experience (see Table 3). As hypothesized, Tourists' Satisfaction had a strong mediating effect between SERVQUAL and Dissemination of Experience, and a moderate effect on the relationship of Ease of Use and Usefulness with Dissemination of Experience (See Table 4). SERVQUAL documented the strongest predicting trait toward Tourists' Satisfaction and Dissemination of Experience (direct effect path coefficient = .381; indirect effect path coefficient = .259).

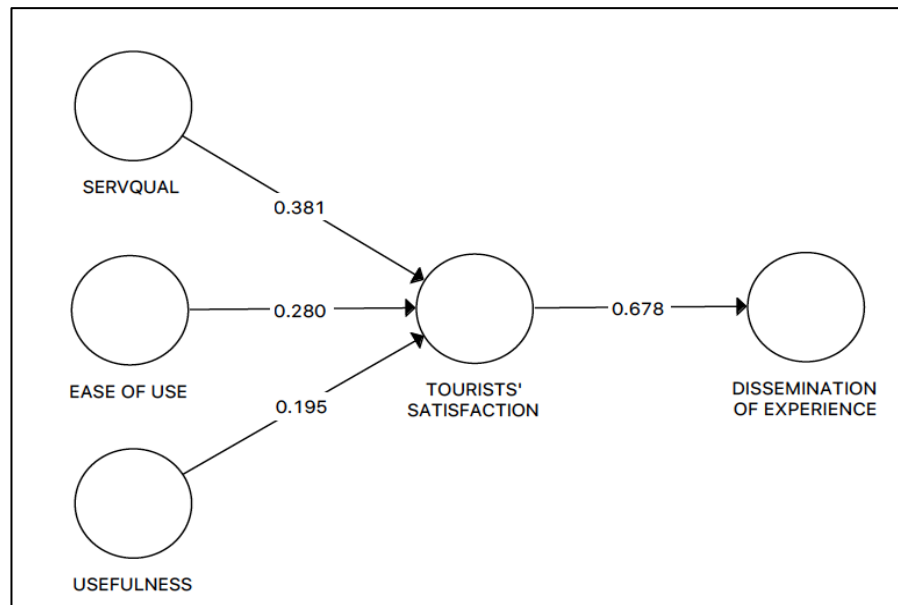


Figure 2: Path analysis

Table 3: Path coefficients (Beta value)

	Dissemination of Experience	Tourists' Satisfaction
Ease of Use		0.280
Service Quality		0.381
Usefulness		0.195
Tourists' Satisfaction	0.678	

R² values can be used to evaluate the strength of the proposed model. In this model, 46% of the variance in Dissemination of Experience was explained by all the variables, and 61.3% of the variance in Tourists' Satisfaction was explained by the three independent variables (i.e., (SERVQUAL, Ease of Use, and Usefulness).

Table 4: Indirect effects

	Dissemination of Experience
Ease of Use	0.190
SERVQUAL	0.259
Usefulness	0.132

5 Discussion and Conclusion

The elements of service quality, perceived ease of use and usefulness of the Wi-Fi services play a significance role in understanding tourist satisfaction and their experience. The study found that Wi-Fi services improve tourists' travel tasks during travel. The findings provide implications for service providers and destination managers to upgrade the services for stability and connection speed since the quality of Wi-Fi in the city was still considered not at a satisfaction level compared to other developed cities. Finally, the main objective of the study is to examine the relationship between Wi-Fi service attributes and tourist satisfactions. All attributes were significant predictors of tourist satisfaction. Specifically, the findings revealed that service quality of the Wi-Fi is the strongest factor influencing tourist experience and satisfaction. This strong effect of SERVQUAL is in line with previous research by Baker and Crompton (2000). Future research could further investigate the other attributes of technology that can enhance tourism experience in Kuala Lumpur. A comparative study among the other facilities could also be investigated to explore the area of high usage and demand of the Wi-Fi services.

Importantly, tourist satisfaction, in this study, clearly illustrated its mediating factor on the relationship between the Wi-Fi service attributes and tourist experience. This significant finding confirmed the important role of satisfaction on experience as documented in a study by Heung and Cheng (2000) where the tourist experience depends highly on their satisfaction with the services provided. In this case, tourist satisfaction is dependent on the three Wi-Fi service attributes. The finding also indicated that experiences were highly determined by the satisfaction in the services in

which they compared the Wi-Fi service quality between facilities, attractions and cities. Lastly, the study looked at the role of tourist satisfaction as the mediator. The main indication to conclude from this research is that quality of the Wi-Fi service is vital to tourist experience. When one attraction is capable of providing good service quality, tourists will have a good experience touring and interacting at the attraction.

6 About the authors

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7 References

- Ahmed, Z. U. (1991). The influence of the components of a state's tourist image on product positioning strategy. *Tourism management*, 12(4), 331-340.
- Akama, J.S., & Kieti, D.M. (2003). Measuring Tourist Satisfaction With Kenya'S Wildlife Safari: A Case Study of Tsavo West National Park. *Tourism Management*, 24, 73-81.
- Baker, D. A., & Crompton, J. L. (2000). Quality, satisfaction and behavioral intentions. *Annals of tourism research*, 27(3), 785-804.
- Barclay, D., Higgins, C., & Thompson, R. (1995). The Partial Least Squares (PLS) Approach to Causal Modelling: Personal Computer Adoption and Use as an Illustration. *Technology Studies, Special Issue on Research Methodology*, 2, 285-309.
- Carman, J. H. (1990). Consumer Perceptions Of Service Quality: An Assessment Of Servqual Dimensions, *Journal of Retailing*, 66, 33-55.
- Chan, J.K.L., & Baum, T. (2007). Researching Consumer Satisfaction. *Journal of Travel & Tourism Marketing*, 23(1), 71-83.
- Chen, C.-F., & Chen, F.-S. (2010). Experience quality, perceived value, satisfaction and behavioral intentions for heritage tourists. *Tourism management*, 31(1), 29-35.
- Chin, W. W. (2010). How to write up and report PLS analyses. *Handbook of partial least squares*, 655-690.
- Chuang, Y.C., Chen, H.P., Chen, Y.R. (2010). The Relationships Among Service Quality, Perceived Value, And Satisfaction – Using Xitou Natural Education Park As An Example. *Journal of Island Tourism Research*, 3(3), 45-62
- Compeau, D., Higgins, C., & Huff, S. (1999). Social Cognitive Theory and Individual Reactions to Computing Technology: A Longitudinal Study. *MIS Quarterly*, 23(2), 145-158.
- Connolly, D., Caulfield, B., & O'Mahony, M. (2009). *Rail passengers' preferences for on-board Wi-fi internet access*. Paper presented at the Proceedings of the 88th annual meeting of the Transportation Research Board, Washington, DC.

- Crompton, J. L., & Love, L. L. (1995). The predictive validity of alternative approaches to evaluating quality of a festival. *Journal of travel research*, 34(1), 11-24.
- Crompton, J.L. & Mackay, K.L. (1989). Users' Perceptions of The Relative Importance Of Service Quality Dimensions In Selected Public Recreation Programs. *Leisure Sciences*, 11, 367-375.
- Cronin, J., & Taylor, S. (1992). Measuring Service Quality: A Reexamination and Extension. *Journal of Marketing*, 56(3), 55-68.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*, 13(3), 319-340.
- Davis, F.D., Bagozzi, R.P., & Warshaw, P.R. (1989). User Acceptance of Computer Technology: A Comparison Of Two Theoretical Models. *Management Science*, 35 (8), 982-1003.
- Davis, F. D., & Venkatesh, V. (1996). A critical assessment of potential measurement biases in the technology acceptance model: three experiments. *International Journal of Human-Computer Studies*, 45(1), 19-45.
- del Bosque, I.R., & San Martin, H. (2008). Tourist Satisfaction: A Cognitive-Affective Model. *Annals of Tourism Research*, 35(2), 5511-573.
- Edvardsen, B., Tomasson, B. And Ovretveit, J. (1994), *Quality Of Service: Making It Really Work*, McGraw-Hill, New York, NY.
- Fick, G.R., & Ritchie, B.J.R. (1991). Measuring Service Quality In The Travel And Tourism Industry. *Journal of Travel Research*, Fall, 2-9.
- Freitas, A.L.P., Costa, H.G. (2012). Development And Testing Of A Multi-Criteria Approach To The Assessment Of Service Quality: An Empirical Study In Brazil. *International Journal of Management*, 29(2), 633-651.
- Gursoy, D., McCleary, K. W., & Lepsito, L. R. (2003). Segmenting dissatisfied restaurant customers based on their complaining response styles. *Journal of foodservice business research*, 6(1), 25-44.
- Gronroos, C. (1993). Toward A Third Phase In Service Quality Research: Challenges And Directions. In Steward, T.A., Bowen, D.E. & Brown, S.W. (Eds.) *Advances In Service Marketing And Management*, 2, Jai Press, Greenwich, Ct. 49-6
- Heung, V. C. S. & Cheng, E. (2000). Assessing Tourists' Satisfaction with Shopping in the Hong Kong Special Administrative Region of China. *Journal of Travel Research*, 38, 396-404.
- Hurley, R. S., & Estelami, H. (1998). Alternative indexes for monitoring customer perceptions of service quality: A comparative evaluation in a retail context. *Journal of Academy of Marketing Science*, 26, 209-221.
- Hui, T. K., Wan, D. & Ho, A. (2007). Tourists' Satisfaction, Recommendation and Revisiting Singapore. *Tourism Management*, 28(4), 965-975.
- Jeyaraj, A., Rottman, J.W., And Lacity, M.C. (2006), A Review Of The Predictors, Linkages, And Biases In IT Innovation Adoption Research, *Journal Of Information Technology*, 21(1),1-23
- Judd, C. M., & Kenny, D. A. (1981). Process analysis: Estimating mediation in treatment evaluations. *Evaluation review*, 5(5), 602-619.
- Kim, D. Y., Park, J., & Morrison, A. M. (2008). A model of traveller acceptance of mobile technology. *International Journal of Tourism Research*, 10(5), 393-407.
- Kotler, P. (2008). *Marketing Management*. 13th Ed., Prentice-Hall, Upper Saddle River, NJ
- Kozak, M., & Rimmington, M. (2000). Tourist satisfaction with Mallorca, Spain, as an off-season holiday destination. *Journal of travel research*, 38(3), 260-269.
- Laws, E. (1995). *Tourist destination management: issues, analysis and policies*. London, UK: Routledge.

- Lee, J., Graefe, A.R., & Burns, R.C. (2004). Service Quality, Satisfaction, And Behavioural Intention Among Forest Visitors. *Journal Of Travel & Tourism Marketing*, 17(1), 73-82.
- Liaw, S. S., & Huang, H. M. (2003). An investigation of users' attitudes towards search engines as an in-formation retrieval tool. *Computers in Human Behavior*, 19(6), 751-765.
- Liaw, S. S., Huang, H. M., & Chen, G.D. (2007). Surveying instructor and learner attitudes towards e- learning. *Computers & Education*, 49, 1066-1080.
- Lin, C.C. (2008) "A Study On The Service Quality, Customer Perceived Values, Satisfaction And Marketing Intentions Of Golf Courses In The Central Region", *Journal of Management Practices And Principles*, 2 (4),196-214.
- Lu, J., Yu, C-S, Liu, C., Yao, J. E. (2003) "Technology Acceptance Model for Wireless Internet", *Internet Research*, Vol. 13 Issue: 3, pp.206-222,
- Morris, M.G., & Venkatesh, V. (2000). Age Differences in Technology Adoption Decisions: Implications for a Changing Workforce. *Personnel Psychology*, 53, 375-403.
- Oliver, R.L. (1997). Cognitive, Affective And Attribute Bases Of The Satisfaction Response. *Journal of Consumer Research*, 20, 418-430
- Neal, J. D., & Gursoy, D. (2008). A multifaceted analysis of tourism satisfaction. *Journal of travel research*, 47(1), 53-62.
- Parasuraman, A., & Colby, C. L. (2015). An updated and streamlined technology readiness index: TRI 2.0. *Journal of service research*, 18(1), 59-74.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1985). A conceptual model of service quality and its implications for future research. *the Journal of Marketing*, 49(4), 41-50.
- Parasuraman, A., Zeithaml, V.A., & Berry, L. (1994). Reassessment Of Expectations As A Comparison Standard In Measuring Service Quality: Implications For Future Research. *Journal Of Marketing*, 58 (1), 111-124
- Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management science*, 46(2), 186-204.
- White, M. C. (2015). Free Hotel Wi-Fi Is Increasingly on Travelers' Must-Have List. *The New York Times*.
- Yuksel, A., & Yuksel, F. (2001). Measurement And Management Issues In Customer Satisfaction Research: Review, Critique And Research Agenda: Part One. *Journal Of Travel & Tourism Management*, 10(4), 47-80.

