Search Convenience and Access Convenience: The Difference Between Website Shopping and Mobile Shopping

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Abstract— Now a day we use online platforms for everything in our daily life. Using shopping online via mobile application and shopping via online website become a typical procedure in our daily life. People like to do shopping online, but we still did not know the different between shopping via mobile apps and website adoption in term of access convenience and search convenience. This study aimed to investigate the different between shopping via mobile apps and website adoption in term of access convenience and search convenience. This study used a sample of 143 participant to measure the adoption of shopping online via both website and mobile shopping. The collected data analyzed using SPSS. The results show that mobile apps is more adopted in term of accessibility but website shopping is more adopted in term searchability. This study did not find significant difference it term of total adoption of both website and mobile shopping. The future researchers could focus in measuring the difference in term of usability and security which we assume could bring a valid result.

Keywords— Access convenience; search convenience, behavioural intention, online shopping

I. INTRODUCTION

The rise of mobile apps and smartphones has changed the way we live, purchase, communicate, and the way we do our business. The number of internet users has been increased up to 1,052 % from the year 2000 to 2018 [1]. Consumers increasingly use various Internet-enabled devices for online shopping [2]. Online shopping enables consumers to purchase products and services at any point of time and wherever they are located. Online shopping allows consumers to save money, effort, and time when purchasing products [3]. The emergence of e-commerce has led to the establishment of a number of online purchasing portals both as e-commerce as well as m-commerce ventures. Consumers have tuned to sites such as flipkart.com, amazon.com, ebay.com, jabong.com, myntra.com and many more for their discounts and shopping convenience [4]. However, it is important to identify the reasons that customers choose to visit an online store [5].

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Previous research suggested that it is important for managers and future researchers to investigates outcomes of using an app, emphasizing the relevance of the identified dimensions [6]. To succeed in the rapidly growing and highly competitive ecommerce environment, it is important to understand the continued usage behaviour of online shopping customers as they relate to enhancing customer conversion and retention [7]. Although, there is generally a lack of research on the implementation of smartphone apps in the service delivery process [6].

Continued usage and adoption of online shopping might be measured by how convenience is costumer with online shopping. Even though, convenience has received relatively little attention in marketing literature, and efforts to develop a valid and comprehensive measure of it have been limited [8]. As discussed above, the internet users increased rabidly, and the online shopping. On the overhand, we can see that the online market now is huge, and people start ordering everything online including daily grocery needs. Since the usage is increased and the marketing and online business became more popular, we still need an answer for a question of what costumer like to adopt more: shopping from online website or shopping from mobile apps? From here, this study aims to understand the costumer's usage behaviour of website and mobile apps shopping by measuring the different between website shopping and mobile shopping in term of customer service convenience. This study aims to make a comparison in term of user adoption of website and mobile shopping.

II. RELATED WORK AND RESEARCH MODEL

Based on the literature review, there is a need to investigate the changes in consumers' attitudes toward using online shopping over time [3]. There are many researchers interested in understanding the effects of convenience on consumer behaviour, and recent empirical studies indicate that convenience influences critical marketing consequences, including customer evaluation and purchase behaviour [8]. Consistent representation and measurement is especially germane in service contexts, where convenience is difficult to standardize and deliver.

ISSN: 2309-0685

58

The Technology acceptance model (TAM) has been used commonly for several years to measure the adoption of new technology [9-15]. The TAM aims to predict the user acceptance based on tow factors; perceived ease of use and perceived usefulness [13, 16]. Furthermore, Unified Theory of Acceptance and Use of Technology (UTAUT) aimed to measure the user acceptance based on the user expectation, social influence and facilitating condition [16, 17].

This study adopted two major dimensions from Jiang et al (2013). Access convenience and search convenience are the first factors that the previous research measured to predict the adoption of online shopping. This dimension has turned out to be the foremost driver of overall online shopping convenience. Online consumers have the advantage of shopping at any time and are able to make multiple economies of time. They can also purchase products from such locations as home and office, rather than at physical stores. These two types of flexibility – time and place - in turn provide psychological benefits by avoiding crowds, reducing waiting time, and expending less effort in traveling to physical stores. Consumers enjoy the benefits of accessibility to products, brands, and stores that are not available in the location where they reside or work. Accessing product over the internet associated potential issues categorised to Availability of products and brands, time flexibility, space flexibility, accessibility of web sites and energy used [18].

Theoretically, the search convenience is measuring how online customers can research products and compare costs without physically visiting multiple locations to find their desired products. According to Jiang et al (2013, consumers regard search inconvenience as a major obstacle to efficient and convenient online shopping. All the product search over the internet associated potential issues categorised to product classification, download speed, search function, and web site design [18].

Empirical studies indicate that convenience influences a variety of consequences, including consumers' behavioural intentions [8, 18, 19]. In term of mobile shopping, Jiang et al (2013), identifies five key convenience dimensions of online shopping including transaction, access, evaluation, search, and possession/post-purchase convenience, as convenience has been one of the principal motivations underlying customer inclinations to adopt online shopping. According to Seiders et al (2007), the service convenience is related positively to behavioural intentions to use the services [8]. Based on the literature review there are limited studies offers an in-depth, systematic studies related into dimensions of online shopping convenience and their specific components of each dimension [18, 20-23].

In e-commerce, service convenience dimension has turned out to be the foremost driver of overall online shopping convenience. Online consumers have the advantage of shopping at any time and are able to make multiple economies of time. They can also purchase products from such locations as home and office, rather than at physical stores. These two types of flexibility – time and place – in turn provide psychological benefits by avoiding crowds, reducing waiting time, and expending less effort in traveling to physical stores. Consumers enjoy the benefits of accessibility to products, brands, and stores that are not available in the location where they reside or work. Accessing product over the internet associated potential issues

categorised to Availability of products and brands, time flexibility, space flexibility, accessibility of web sites and energy used [18]. Behavioural intention is the main predictor of the service adoption, it can predict the future behaviour of the users to reuse the service again in the future and the willingness to recommended to others [10]. This study adopted two major dimensions from Jiang et al (2013). Access convenience and search convenience are the first factors that the previous research measured to predict the adoption of online shopping. Table 1 below conclude the suggested hypothesis to achieve the aim of this study.

TABLE 1: SUGGESTED HYPOTHESES

No	Hypothesis						
H1	Access convenience has significant effect on behavioural						
	intention to shop via mobile apps						
H2	Search convenience has significant effect on behavioural						
	intention to shop via mobile apps						
Н3	Access convenience has significant effect on behavioural						
	intention to shop via online website						
H4	Search convenience has significant effect on behavioural						
	intention to shop via online website						

III. RESEARCH METHODOLOGY

Data for this study were collected from 130 online shopping users in Saudi Arabia. The survey data was obtained online by using google forms. Scales from prior research were adjusted to the online shopping context. All items were measured on a fivepoint Likert scale ranging from 1= strongly disagree to 5= strongly agree. The collected date verified by two professors from the department of MIS (Management information system). The survey data test using SPSS and the initial reliability test for all items illustrate the collect data acceptable level of reliability .871 which is higher that the recommended level above .70 [24]. The Cronbach's Alpha for the measuring the access convenience for shopping via website (ACW) is .763, search convenience for shopping via website (SCW) .711, behavioural intention to use shopping via website (BIW) .770. he Cronbach's Alpha for the measuring the access convenience for shopping via mobile apps (ACM) is .809, search convenience for shopping via mobile apps (SCM) .713, behavioural intention to use shopping via mobile apps (BIM) .871. these results illustrated that all items used in the study have stable consistency.

A. Sample characteristic

From the total 143 participants, the highest participation of the study comes from the age 35-39 years old which represent 38.5% of the sample size. The smallest participation comes from the age group above 50 years old which represent 3.5% from the total sample size. This sample represent a 53.1 male and 46.9 females. The income of this sample is medium from 1000\$\$ to 3000\$\$ per month. Sample of the study illustrated in Table II.

TABLE III. SAMPLE CHARACTERISTICS

		N	%
Age	18-24	8	5.6
	25-34	41	28.7
	35-39	55	38.5
	40-49	34	23.8
	Above 50	5	3.5
Gender	Male	76	53.1
	Female	67	46.9
Income	Less than 1000\$	38	26.6
	1000\$ - 3000\$	47	32.9

	more 3000\$ - less 5000\$	37	25.9
	More than 5000\$	21	14.7
Total		143	100

B. Descriptive Statistics

Table 2 below illustrated the mean and standard deviation of the items used in this study to measure the adoption of shopping via website and mobile shopping.

TABLE III. EXPLORING THE ITEMS USED IN THIS STUDY

Constructs	Code	Mean	SD
Access convenience via shopping website	ACW	3.82	.892
When I use online shopping via website, I could shop anytime I wanted	ACW1	3.74	.998
The web site is always accessible	ACW2	3.87	.788
When I use online shopping via website, I could order products wherever I am	ACW3	3.85	.841
Search convenience via shopping website	SCW	3.84	.658
The web site is user-friendly for making purchases	SCW1	3.73	.858
The web site is easy to understand and navigate	SCW2	3.74	.967
The web site is very attractive	SCW3	3.99	.746
When I use online shopping via website, I am able to find desired products quickly	SCW4	4.03	.921
When I use online shopping via website, the product classification is intuitive and easy to follow	SCW5	3.77	.979
When I use online shopping via website, I am able to find the same product using a variety of online search options	SCW6		.922
Behavioural intentions to shop using website	BIW	4.17	.763
I will continue to shop online using website shopping.	BIW1	4.07	.819
I encourage others to shop online using website	BIW2	4.25	.953
I will use shopping website to do shopping more often in the future.	BIW3	4.20	.988

From the table III above we illustrate that the mean for access convenience for shopping via website is 3.82 while the access convenience for shopping via mobile application is 4.20. Furthermore, the mean value for search convenience via website is 3.84 and for mobile application shopping is 4.11. In the end we can illustrate the intention for shopping via website, based on the mean value of 4.17 is higher than costumer's intention to shop using mobile application with mean value of 4.06.

IV. DISCUSSION

A. Results of Regression Test

The regression test is used in this study to measure the effect of independents variables on the dependent variables. Table III illustrate that all research hypotheses were accepted. As shown in the table IV below, the effect access convenience on behavioural intention to use mobile apps is 3.59 which is higher than the access convenience for shopping via online website (t= 2.73). in the other hand, the effect of search convenience via website shopping (t= 4.81) is higher than search convenience via mobile apps (t= 2.10).

TABLE IV. REGRESSION TEST FOR HYPOTHESES

No	Hypothesis	t	Sig.	Indicator
Ha	Access convenience has	3.59	.000	Accepted
	significant effect on			
	behavioural intention to shop			
	via mobile apps			
H2	Search convenience has	2.10	.037	Accepted

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Constructs	Code	Mean	SD
Access convenience via mobile apps	ACM	4.11	.769
When I use online shopping via mobile apps, I	ACM1	4.01	.884
could shop anytime I wanted.			
The mobile apps is always accessible.	ACM2	4.19	.927
When I use online shopping via mobile apps, I	ACM3	4.14	.885
could order products wherever I am			
Search convenience via mobile apps	SCM	4.17	.752
The mobile shopping apps is user-friendly for	SCM1	4.20	.939
making purchases			
The mobile shopping apps is easy to	SCM2	4.29	.924
understand and navigate			
The mobile shopping apps is very attractive	SCM3	4.17	.661
When I use online shopping via mobile apps, I	SCM4	4.36	.835
am able to find desired products quickly.			
When I use online shopping via mobile apps,	SCM5	4.09	.941
the product classification is intuitive and easy			
to follow.			
When I use online shopping via mobile apps, I	SCM6	4.13	.777
am able to find the same product using a			
variety of online search options			
Behavioural intentions to shop using mobile	BIM	4.06	.959
apps			
I will continue to shop online using mobile	BIM1	4.14	.898
shopping.			
I encourage others to shop online using mobile	BIM2	4.03	.797
apps			
I will use mobile shopping more often in the	BIM3	4.02	.858
future.			

	significant effect on behavioural intention to shop via mobile apps			
НЗ	Access convenience has significant effect on behavioural intention to shop via online website	2.73	.007	Accepted
H4	Search convenience has significant effect on behavioural intention to shop via online website	4.81	.000	Accepted

B. Results of Paired Samples Test

The Paired Samples Test is used in this study to measure the different between both dependent variables behavioural intention to use online shopping via website (BIW) and behavioural intention to use online shopping via mobile apps (BIM).

		TAI	BLE V.	ONE-S	SAMPLE T	EST		
	Paired Differences							
		Std.	Std. Error	95% Co Interval Difference				Sig. (2- tailed
	Mean		Mean	Lower	Upper	t	df)
BIW - BIM		.97592	.08161	05410	.26856	1.314	142	.191

Table V above conclude the Paired Samples Test which was run to determine whether there are a significant different in mean between both BIW and BIM. The mean for BIM is 4.06

and the mean for BIW is 4.17. The Confidence Interval (CI) shows the lowers value of -.0541 and the upper CI value is .268. The average difference between the BIW and BIM is .107. The paired T test statistic (t) value is 1.314 which statistically not significant with p value of .191 which less than 0.05.

In summary, this study aims to investigate the different between shopping online via mobile apps and website shopping. The result of this study conclude that costumers find that using mobile apps for online shopping is more acceptable (t value 3.59) than shopping using online website (t value 2.73). But in the other hand, costumers find that the search convenience (t value 4.18) via shopping website is more acceptable than searching via mobile application (t value 2.10). Furthermore, there is no significant different between shopping via mobile apps and website shopping. The implication of this study helps the managers to increase accessibility of shopping website as costumers to make it as efficient as shopping via mobile application. Meanwhile, the mangers should consider the search convenience of mobile application still not sufficient as shopping via online website. This study contributes the field of marketing and application developers to enhance the searchability and accessibility of the e-commerce platforms. The future researchers could investigate other factors that might influence the adoption of shopping online or can make a different between shopping via mobile applications or via shopping website. Factors such as security and usability could bring valid results.

V. CONCLUSION

The purpose of this paper is to investigate the different between shopping via mobile application and website shopping in term of adoption. This study adopted two main factors namely access convenience and search convenience as a predictors of online shopping acceptance. The data collected from 143 participants and analysed using SPSS. The results of data analysis illustrated that the mobile application acceptance is more effect by the access convenience than search convenience, while using website to shop is more effected by search convenience than access convenience. This study did not find significant difference between the adoption of shopping via website or mobile application. This study limited to two factors only, future researchers could investigate the different between both mobile apps and website shopping in term of security and usability.

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ISSN: 2309-0685

61