

## An Empirical Study on the Customers' Satisfaction on Fintech Mobile Payment Services in Malaysia

Shaliza Alwi<sup>1\*</sup>, Rabiatul Munirah Alpandi<sup>2</sup>, Masrina Nadia Mohd Salleh<sup>3</sup>, Irfah Najihah Basir<sup>4</sup> and Farrah Fawzia Md Ariff<sup>5</sup>

<sup>1,2,4</sup>Taylors University, Malaysia  
<sup>3,5</sup>INTI International College, Malaysia

### Abstract

The financial industry has been a competitive industry as financial institutions are providing almost similar products and services. This results them in competing based on service quality. In addition to that, the fast evolution in technology has cause Fintech application mobile to be introduced in Malaysia. Thus, this research will look into the several factors affecting customer satisfaction in Malaysia where ease of use, Security & Privacy, Information Presentation, Convenience and Lastly Service Quality will be taken into account by applying variable associated to the integration Theory of Dissonance, Assimilation and Contrast. This paper is a quantitative study where data are collected through online questionnaires. The results of the Pearson correlation analysis have shown that Security and Privacy (SP) is the strong influential factor of customer satisfaction towards Fintech mobile payment services followed by Service Quality (SQ), Information Presentation (IP) and Ease of Use (EOU). Therefore, financial institutions in Malaysia can enhance the security and privacy level or create awareness among their customers by giving and insight or explanation on the security level as well as privacy.

**Keywords:** *Fintech, assimilation theory, dissonance theory, contrast theory, customer satisfaction, Fintech mobile payment services*

### 1. Introduction

In this era of Industrial Revolution (IR 4.0), internet has played an important role in every person's life. The usage of internet has been increasing drastically ever since it was introduced during year 1995 where there are only 16 million users and recently reached 4,346 million users [1]. With internet, the fast evolution of technology has allowed financial institutions to have the thought of introducing internet banking to replace traditional banking. Internet banking (E-banking) was first introduced in Malaysia during year 2000 by Maybank. E-banking is where a person is able to do any banking activities by just accessing a bank's website using their personal computers by means of internet [2]. Reported by The Star Online, E-banking in Malaysia is said to be successful when the recent data (Year 2017) showed that 73.1% of the Malaysia's human population were already performing banking activities using E-banking compared to the past (Year 2015) where 9.8% of them only practiced using e-banking [3]. Then, during year 2002, Maybank introduced mobile banking services to its customers but was only SMS based. Following onto that, advancement of technology has made smart devices available to everyone and has become an important part for every person's life. According to the news published by The Malaysian Reserve, in year 2017, 80 percent of the country population are smartphones users and is expected to exceed 100 percent by 2018 [4]. Besides the affordability of owning a mobile device, it is owned by almost everyone in the world due to its major benefit which provide convenience and its ease of use. The continuous innovation of technology gave insights to financial institutions to introduce Fintech mobile apps. The adoption of technology in finance also reduces cost for both parties, the bank and its customers. Reported by The Star Online, the usage of technology in the bank industry had save approximately RM231 million and RM611 million in terms of cheque processing cost and interbank giro fees during year 2013-2015 [5]. FinTech revolution has been called 'the most profound transformation in history with the total venture capital invested in Fintech in year 2017 amounting to \$12.85 billion [6]. Fintech application growth rate stands at 30% a year and since it was introduced in Malaysia, the

penetration rate of mobile application in Malaysia has an upward trend. The frequent emergence of Fintech mobile application is an evident of Fintech's continues innovation.

This research on factors affecting customer satisfaction towards Fintech mobile payment services in Malaysia was done as there are limited studies on the research topic due to limited research associated with Fintech mobile payment services was done. Customer satisfaction is one of the important areas a firm has to look into to retain its customers and to improve the amount new customers. Dissatisfied customers will look for other firm or institution that is able to provide better service, convenience, etc. Satisfied customers will not mean that there will be a repeated purchase but creating customer loyalty is not possible if a customer is not satisfied [7]. Financial institutions are unable to do product differentiation in the banking industry to create competitive advantage in the industry as all other financial institutions have almost similar products. That is, financial institutions usually compete by offering lower interest rates or providing small additional range of products available for customers. So, financial institutions are differentiating themselves from their competitors by giving better quality of service which improves customer's satisfaction [8]. Therefore, customer satisfaction is one of the important areas where a bank has to look into. However, there are several factors that may affect customer satisfaction with Fintech application mobile which this research aims to find out. Adding into the problem, Malaysians are still relying more on internet banking compared to Fintech application mobile. The Fintech Malaysia report for year 2018 revealed that the internet penetration in Malaysia is 85.7% and online banking penetration achieved 85.1% while Fintech application mobile penetration is at 40% only. Though data revealed that there is a lower value in transaction for Fintech application mobile, it is seen that Fintech application mobile is a preferred alternative for micropayments as report shows that there is a larger volume in transaction [9], which can be deduced that there is still insufficient confidence among customers in the security of Fintech application mobile. The cause of lower Fintech application mobile penetration may be due to several factors such as word of mouth where dissatisfied customers are encouraging their friends, colleague and family members to stick with traditional banking and internet banking instead of adopting new alternative such as Fintech application mobile when doing banking activities which provide greater benefits.

## **2. Literature Review**

### **2.1. Dissonance Theory**

Dissonance theory states that one will experience cognitive dissonance if he or she expected a product to have high quality but ended up experiencing lower quality. This means that, a person will compare cognitively their expectancy on a specific product and its actual performance. Previous researcher found out that one will always experience dissonance if there is inconsistency between a person's expectation and actual product or service performance [10]. As such, in the case of subjective disconfirmation, a person will always try to not expect much on a product or service or try to perceive a product or service more positively to avoid experiencing dissonance [11]. Thus, Dissonance theory suggested that a person is able to decrease their dissatisfaction towards a product or service level by reducing their expectations towards a product or service in attempt to reduce their importance for experience disconfirmation which will increase satisfaction level [12].

### **2.2. Assimilation Theory**

Assimilation Theory was formed based on Festinger's theory of dissonance. Under dissonance theory, if a person is said to compare cognitively their expectations of a product or service with the actual perceived performance of the product or service and is said to have inconsistency, one will surely face dissonance [10]. In [11] views that a person will try preventing themselves from experiencing dissonance by trying to keep perception towards a product in line with their expectation. A person can distort anticipations to reduce tension that resulted from difference of expectations and actual product performance which will allow them to match with actual product performance [13]. Researchers found that control on product performance will cause expectations and satisfaction to have a positive relationship. Subsequently, an assumption was

made that a person will not be dissatisfied if evaluation process begins with customer's positive expectations [11]. The theory deduced that every person is sufficiently determined to adjust expectations towards a product and the perceptions towards the performance of a product. A higher level of satisfaction is achievable if a person is willing to change their view on the product actual performance to allow them to pair closely to what they expected from the product [10].

### **2.3. Contrast Theory**

Contrast theory holds that contrast between expectation and result will trigger a person to overstate discrepancy when a product or service is not able to achieve the level that is expected [14]. Also, contrast theory states that a person who experience lower actual performance compared to its expectation on a product/service will cause the difference between the actual performance and expected performance of a product/service to be magnified by the affected person [15]-[16]. For instance, if a product or service actual performance is unable to reach a person's expectation, he or she will criticize the product or service more than if he/she did not have any expectations for the product/services [11]. Previous studies made can be used to support the statement. For instance, Spector was able to discover subjects whose actual product experience is able to meet their expectations will be evaluated more favorably than subjects whose expectancy was adversely disconfirmed [17].

### **2.4. Customer Satisfaction**

Customer satisfaction is the assessment on how an actual product/services meet or outperform consumer expectation. It was then continued that customer satisfaction can be achieved by delivering what customers have expected from a product/service where in this research, if the expectations on Fintech mobile payment services is convenient, and is met by the delivered service, the level of customer satisfaction is said to be high vice-versa. In [18] understands satisfaction as a pleasant response of the user. Commonly, customer satisfaction is one of the important areas which can cause impact on the formation of experienced customer intentions to repurchase a product or reuse services in the coming future [19]. The major determinants of a company competitiveness and achievement in their industry is customers' satisfaction with the products or services [20]. Several studies have concluded that customer satisfaction is able to buy future turnover in which satisfied customer will not be sensitive to price changes which brings lower future transaction cost [21]. Customers are said to be dissatisfied when their actual performance of a product/service is not aligned with what they have expected vice versa [22]. When a customer is satisfied, it found will help create a strong branding and profitable relationship [23]. Thus, in retaining a customer, an organization should emphasize on their quality of service and charging their customers appropriately without overpricing which will satisfy their customers [24].

## **3. Methodology**

Descriptive analysis is the conversion of raw data into more simplified version which will allow researchers to understand and interpret at ease [25]. It is usually adopted to explain characteristic of a sample and also to compare findings of the samples with other study which is also the intention of adopting descriptive analysis in this study. Not only that, descriptive analysis will be adopted to help in pin-pointing outliers as well as identifying how variables are associated to one and another.

### **3.1. Data Collection Method**

Data collection refers to the variety measures taken in obtaining and formulating information [26]. The two methods under data collection used for this research is through primary and secondary data. Primary data is adopted in this research as it provides more accurate information as question relevant to the research topic are asked in the survey while secondary data is adopted as it is convenient and reliable as previous researchers/authors have already verified the reliability of the sources [24]. In this research the primary data were collected through the survey forms which was developed using google forms. It was then distributed personally and with the help of my peers to approximate 300 people in Malaysia as a sample for Malaysians degree of

acceptance and satisfaction towards Fintech mobile payment services. In completing this research paper, secondary data are obtained from several sources such as academic journals, research papers, and many more that were sourced through search engines such as google scholar and online academic databases such as JSTOR, ResearchGate, etc. In addition to that, the university has also made Taylors library where there are unlimited research papers with full of information which this research paper used in supporting several statements and definitions.

### **3.2. Sampling Design**

In this research, the targeted respondents are the human population in Malaysia that engage in Fintech mobile payment services in conducting their financial activities. A researcher has to determine its targeted respondent when doing a research as without a target respondent, the researcher will not receive information which he/she wishes to collect. For instance, if this research paper does not have a targeted respondent, the survey passed on may be answered by people who are not from Malaysia which will affect the accuracy and quality of data. This paper targeted respondents are the human population which has the age of 17 and above and have the experience using Fintech mobile payment services in Malaysia. This is because most of the Fintech mobile payment services users are aged 17 and above and those who are below the age of 17 are not clear with their judgement towards what they have experience. Besides people who are not above the age of 17 will most likely engage in Fintech mobile payment services just for the convenience in transactions which reduce the accuracy of data collected as they will most likely be satisfied just because they are able to transfer money conveniently compared to those who are above 17 which will consider other factors such as security and the service availability.

### **3.3. Research Instrument**

The instrument adopted in obtaining data in this research is through online survey questions that were self-developed as well as from past papers that is related to the research topic. E-questionnaires were adopted as it cost efficient, time-efficient and provides accurate information which the researchers wish to look for. E-Questionnaire also allows one to easily analyze result as website such as google forms will simplify and conclude the answered survey questions. It also allows the researcher to reach out a large scale of population without needing the researcher to appoint to one just for their response. The questionnaire developed consist of 33 questions and is a mixture of Likert type scales and multiple choice question. The 33 question developed are divided into 3 section which includes Section A: Demographic Information, Section B: Customer satisfaction towards Fintech mobile payment services in Malaysia and Section C: Determinants of customer satisfaction towards Fintech mobile payment services in Malaysia. The questions developed are in Likert type scales as it is able to point out how strongly a person is satisfied/dissatisfied with mobile banking or agree/disagree with the statement unlike close ended questions where we do not know if respondents are neutral or slightly agree/disagree with the proposed statement. Questions developed are also simple and can be understood easily as researcher does not want respondents to have a wrong understanding when reading the developed survey question/statement.

### **3.4. Reliability Test**

Reliability test measures to what extent a scale is able to produce results that are consistent after several attempts in testing. The focus when doing reliability test is to make sure that all information that has been collected from the developed questionnaires has the element of reliability and consistency. The most common way used by all researchers in testing data reliability is Cronbach's Alpha which will also be used in this study. The Cronbach's Alpha test consist of 4 categorized range for the alpha coefficients where a score of 0-0.59 shows that that the data has poor reliability, 0.6-0.69 shows that the data is fairly reliable, 0.7-0.79 shows that the data has good reliability and data which has a score of more than equal 0.80 is considered data with excellent good reliability.

### 3.5. Inferential Analysis

Reliability holds that inferential analysis allows a researcher to analyze whether or not there are discrepancy among samples in numerical order. In [27] mentioned that one is able to conclude whether or not the population variables are related depends on the sample data. In this research study, Pearson correlation analysis accompanied by Single and Multiple linear regression analysis will be adopted to help in concluding the hypothesis developed at the theoretical framework section.

### 3.6. Pearson Correlation Analysis

This analysis is used to measure covariance between variables which in this case, the covariance between the independent variable (IP, SP, C, EOU, SQ) and dependent variable (Customer satisfaction towards Fintech application mobile). Directions and to what extent the variables have a relationship will be determined by the correlation coefficient (r). Correlation efficient (r) has a scale of -1.0 to +1.0 where any value that is close to -1.0 will mean that the variables are strongly negatively related and any value that is close to +1.0 will mean that the variables are strongly positively related while 0 will mean that the variables are not correlated.

### 3.7. Multiple Linear Regression Analysis

This analysis was adopted to summarize relationship between variables but in multiple linear regression where more than two variables are involved. Furthermore, this analysis allows one to indicate which independent variable has the most influence on dependent variable to the least influential. This research has adopted multiple linear regression to conclude which of the five independent variable is the most influential variable to the least influential variable on customer’s satisfaction towards Fintech application mobile.

## 4. Results and Discussion

An extensive review on the results which has been collected through questionnaires which has been generated into statistical order and tested on the hypothesis and relationship validity using ‘SPSS’. In reviewing the results, the method used is mentioned in the previous chapter (Descriptive Analysis, Scale measurement, Inferential Analysis)

### 4.1. Demographic Profile

Figure 1 has shown a total number 274 survey response collected. Out of the 274 respondents, the amount of male response outnumbered female response where there are 158 responses from the male compared to the female 116 responses only. In describing the result based on the chart, the male respondents have covered 57.66% out of 100% response while the remaining 42.34% is covered by female respondents.

		Gender			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	116	42.3	42.3	42.3
	Male	158	57.7	57.7	100.0
Total		274	100.0	100.0	

**Figure 1. Gender Profile**

Figure 2 has shown a 165 (60.22%) of the respondents are of aged between 21-30, 55 (20.07) of them are of aged between 17-20, 44 (16.06) of them are of aged between 31-40 and the leftover 10 (3.65%) are of aged between 41 and above.

Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	17-20	55	20.1	20.1	20.1
	21-30	165	60.2	60.2	80.3
	31-40	44	16.1	16.1	96.4
	41 and above	10	3.6	3.6	100.0
	Total	274	100.0	100.0	

**Figure 2. Age Profile**

Figure 3 has shown a respondent who are of Chinese race outnumbered the other races, Malay, Indian and Others amounting to 192 respondents as compared to 54 for Malay respondents, 24 for Indian respondents and remaining 4 is others. In another way of explaining, the number of Chinese respondents has covered 70.07% while the remaining 29.93% are consist of Malay (19.71%), Indian (8.76%) and Other raced (1.46) respondent.

Race					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Chinese	192	70.1	70.1	70.1
	Indian	24	8.8	8.8	78.8
	Malay	54	19.7	19.7	98.5
	Others	4	1.5	1.5	100.0
	Total	274	100.0	100.0	

**Figure 3. Race Profile**

Figure 4 has shown a respondent who are having bachelors’ degree amounted to 114, followed by SPM (54 respondents), Diploma, Advance Diploma, STPM (48 respondents), Masters (36 respondents) and none of the included education level (22). Clearly, the respondents who are having Bachelors’ Degree Dominated in participating in this survey amounting to 41.61% and the rest are holding SPM (19.71%), Diploma, Advance Diploma, STPM (17.52%), Masters (13.14) and None of the included education level (8.03%).

HighestEducationLevel					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bachelors' Degree	114	41.6	41.6	41.6
	Diploma, Advance Diploma, STPM	48	17.5	17.5	59.1
	Masters'	36	13.1	13.1	72.3
	None of the above	22	8.0	8.0	80.3
	SPM	54	19.7	19.7	100.0
	Total	274	100.0	100.0	

**Figure 4. Educational Level Profile**

Figure 5 has shown a majority of the respondents are having an income between RM1000-RM2500 comprising 105 out of 274 respondents, having the percentage of 38.32% out of 100%. The remaining 169 (61.68%) respondents are consist of respondents earning in between the range of RM2501-RM5000 (87 respondents / 31.8%), &lt; RM1000 (55 respondents / 20.07%), &gt; RM5000 (27 respondents / 9.85%) monthly.

MonthlyIncome					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	< RM1000	55	20.1	20.1	20.1
	> RM5000	27	9.9	9.9	29.9
	RM1000 - RM2500	105	38.3	38.3	68.2
	RM2501 - RM5000	87	31.8	31.8	100.0
	Total	274	100.0	100.0	

**Figure 5. Monthly Income Profile**

#### 4.2. Central Tendency of Measurement of Construct

Figure 6 is the list of questions for each independent variable has the highest mean value. From the generated data using SSPS, we can deduce that Q2 has the highest mean of 4.70 followed by Q4, Q1, Q3 and the lowest mean of 4.58 belongs to Q5.

		Statistics				
		C1	C2	C3	C4	C5
N	Valid	274	274	274	274	274
	Missing	0	0	0	0	0
Mean		4.67	4.70	4.65	4.69	4.58
Std. Error of Mean		.034	.034	.036	.033	.044
Median		5.00	5.00	5.00	5.00	5.00
Mode		5	5	5	5	5
Std. Deviation		.569	.566	.595	.543	.723
Variance		.324	.320	.354	.295	.522
Skewness		-1.664	-1.997	-1.474	-1.558	-2.056
Std. Error of Skewness		.147	.147	.147	.147	.147
Kurtosis		2.402	4.166	1.112	1.508	4.981
Std. Error of Kurtosis		.293	.293	.293	.293	.293
Range		3	3	2	2	4
Minimum		2	2	3	3	1
Maximum		5	5	5	5	5
Sum		1280	1288	1273	1285	1256
Percentiles	25	4.00	4.00	4.00	4.00	4.00
	50	5.00	5.00	5.00	5.00	5.00
	75	5.00	5.00	5.00	5.00	5.00

Figure 6. Central Tendencies of Construct for Convenience

		Correlations					
		C	SP	SQ	IP	EOU	CS
C	Pearson Correlation	1	.643**	.789**	.664**	.772**	.693**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	274	274	274	274	274	274
SP	Pearson Correlation	.643**	1	.696**	.662**	.710**	.759**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	274	274	274	274	274	274
SQ	Pearson Correlation	.789**	.696**	1	.669**	.842**	.712**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	274	274	274	274	274	274
IP	Pearson Correlation	.664**	.662**	.669**	1	.738**	.710**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	274	274	274	274	274	274
EOU	Pearson Correlation	.772**	.710**	.842**	.738**	1	.719**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	274	274	274	274	274	274
CS	Pearson Correlation	.693**	.759**	.712**	.710**	.719**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	274	274	274	274	274	274

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Figure 7. Central Tendencies of Construct for Convenience

Variables	Cronbach's Alpha Coefficient	Items
Convenience	0.922	5
Security & Privacy	0.750	4
Service Quality	0.962	5
Information Presentation	0.669	3
Ease of Use	0.934	5

Figure 8. Results of Reliability Test on Independent Variables

After generating the reliability test using SPSS and referring to the rule of thumb, we can deduce that Service Quality has highest coefficient value of 0.962 which falls under the range of

Excellent Good Reliability as shown in Figure 8. There are also other two independent variables falling into the range of Excellent Good Reliability which is Ease of Use (0.934) and Convenience (0.922). Following on to that, security and privacy is able to achieve a coefficient value of 0.75 falling under the range of Good Reliability as shown in Figure 8. Not to forget, security privacy is able to achieve a coefficient value of 0.75 which falls under the category of Good Reliability. Lastly, the lowest coefficient value of 0.669 which falls under the category of Fair Reliability belongs to information presentation. The common rule when doing Cronbach Alpha Coefficient test is where the coefficient of the tested variables is accepted if coefficient is more than 0.6 [28]. Thus, we can conclude that the data of all five proposed independent variables are reliable.

		Correlations					
		C	SP	SQ	IP	EOU	CS
C	Pearson Correlation	1	.643**	.789**	.664**	.772**	.693**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	274	274	274	274	274	274
SP	Pearson Correlation	.643**	1	.696**	.662**	.710**	.759**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	274	274	274	274	274	274
SQ	Pearson Correlation	.789**	.696**	1	.669**	.842**	.712**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	274	274	274	274	274	274
IP	Pearson Correlation	.664**	.662**	.669**	1	.738**	.710**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	274	274	274	274	274	274
EOU	Pearson Correlation	.772**	.710**	.842**	.738**	1	.719**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	274	274	274	274	274	274
CS	Pearson Correlation	.693**	.759**	.712**	.710**	.719**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	274	274	274	274	274	274

\*\* . Correlation is significant at the 0.01 level (2-tailed).

**Figure 9. Pearson Correlation Analysis Data**

After generating Pearson Correlation Analysis result, we can deduce that four of the proposed independent variables fall under the category of strong (Security & Privacy, Service Quality, Information Presentation and Ease of Use) and one independent variable (Convenience) fall under moderate category but close to strong category. Directions and to what extent the variables have a relationship will be determined by the correlation coefficient (R). Thus, based on the generated results, we can conclude that security and privacy, service quality, information presentation and ease of use have strong positive influence on customer satisfaction while convenience have moderate positive influence on customer satisfaction.

### 4.3. Multiple Regression Analysis

The generated data in Figure 10, it can be concluded that the correlation coefficient (R) of 0.83 means that there is a strong correlation between both independent (Ease of Use, Security and Privacy, Information Presentation, Convenience, Service and Quality) and dependent variables (Customer satisfaction). While, correlation coefficient (R) determines the relationship between variables, R Square determines the portion of dependent variable that can be explained by the independent variable. Thus, we can deduce that the R square value of 0.688 is explained as 68.8% of customer satisfaction towards mobile banking is explained by the proposed independent variables whereas the leftover 31.2% is explained by other causes.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.830 <sup>a</sup>	.688	.683	.37702

a. Predictors: (Constant), EOU, SP, IP, C, SQ

Figure 10. Multiple Regression Analysis Data

#### 4.4. ANOVA

Figure 11 has shown that there is a relationship between both dependent variable (Customer satisfaction towards mobile banking) and independent variables (Ease of use, Security and Privacy, Convenience, Information presentation and Service Quality) as the P value (.000) is lower than alpha value (0.1).

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	84.139	5	16.828	118.383	.000 <sup>b</sup>
	Residual	38.095	268	.142		
	Total	122.234	273			

a. Dependent Variable: CS  
 b. Predictors: (Constant), EOU, SP, IP, C, SQ

Figure 11. Multiple Regression Analysis Data

#### 4.5. Coefficients

To elaborate, by referring to Figure 12, all the five proposed independent variables have a positive impact on customer satisfaction towards mobile banking. In detail, among the five independent variables Security & Privacy has the highest  $\beta$  which means that it is strongest influence factor for customer satisfaction among the five proposed independent variables. It can be elaborated as, when S&P increases by 1 unit, customer’s satisfaction will increase by 0.422 unit. The explanation is applicable to other independent variables by referring to the  $\beta$  of each independent variable where information presentation (0.294) is indicated as the next most influential factor for customer satisfaction followed by convenience (0.196), service quality (0.132) and lastly the least influential factor, ease of use which is by 0.051 units only.

Coefficients <sup>a</sup>						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.627	.227		-2.769	.006
	C	.196	.076	.154	2.571	.011
	SP	.422	.057	.383	7.340	.000
	SQ	.132	.074	.126	1.789	.075
	IP	.294	.068	.233	4.342	.000
	EOU	.051	.074	.050	.680	.497

a. Dependent Variable: CS

Figure 12. Multiple Regression Analysis Data

#### 4.6. Hypothesis Testing

Hypothesis is tested according to the rule of thumb on which any independent variable that has a P-value higher than alpha value of 0.1/10%, the hypothesis is rejected.

##### 4.6.1. Relationship between customer satisfaction and ease of use (EOU)

H1; Ease of use (EOU) and customer satisfaction towards Fintech mobile payment services are positively related. EOU has a P-value of 0.497/49.7% which exceeded alpha value of

0.01/10%. Thus, H1 is rejected which shows insignificant relationship between customer satisfaction and ease of use.

#### **4.6.2. Relationship between customer satisfaction and security and privacy (SP)**

H2; Security & Privacy (S&P) and customer satisfaction towards Fintech mobile payment services are positively related. S&P has a P-value of 0.000/0% which did not exceed alpha value of 0.1/10%. Thus, H2 is not rejected which shows a significant positive relationship between customer satisfaction and security and privacy.

#### **4.6.3. Relationship between customer satisfaction and information presentation (IP)**

H3; Information Presentation (IP) and customer satisfaction towards Fintech mobile payment services are positive related. IP has a P-value of 0.000/0% which did not exceed alpha value of 0.1/10%. Thus H3 is not rejected which shows a significant positive relationship between customer satisfaction and information presentation.

#### **4.6.4. Relationship between customer satisfaction and convenience (C)**

H4; Convenience (C) and customer satisfaction towards Fintech mobile payment services are positively related. Convenience has a P-value of 0.011/1% which did not exceed alpha value of 0.1/10%. Thus H4 is not rejected which shows a significant positive relationship between customer satisfaction and convenience

#### **4.6.5. Relationship between customer satisfaction and service quality (SQ)**

H5; Service quality (SQ) and customer satisfaction towards Fintech mobile payment services are positively related. SQ has a P-value of 0.075/7.5% which did not exceed alpha value of 0.1/10%. Thus, H5 is not rejected which shows significant positive relationship between customer satisfaction and service quality.

## **5. Conclusion**

This study has evidenced that there is a strong correlation between both independent variable (Ease of Use, Security and Privacy, Information Presentation, Convenience, Service and Quality) and dependent variables (Customer satisfaction). Also, approximately 68.8% of customer satisfaction towards Fintech mobile payment services is explained by the proposed independent variables whereas the leftover 31.2% is explained by other causes. This means that there is a relationship between the proposed independent variables and customer satisfaction. Due to the huge portion of the respondents are of aged 21-30, therefore, the recommendations below are best for improving the satisfaction of customers who are of aged 21-30. The results of the Pearson correlation analysis have shown that Security and Privacy is the strong influential factor of customer satisfaction towards Fintech mobile payment services followed by Service Quality, Information Presentation and Ease of Use. Therefore, financial services provider in Malaysia can enhance the security and privacy level or create awareness among their customers by giving and insight or explanation on the security level as well as privacy. Not only that, they should enhance their service quality such as increasing the speed of transactions and making sure customers Fintech mobile payment services account are always up-to-date. Following on to that, financial services provider should focus on the information presentation of their Fintech mobile payment services which will indirectly increase the ease of use in Fintech mobile payment services. For instance, designing an interface and display format which is simple as well using comforting colors in the presentation of the Fintech mobile payment services application. This will then decrease difficulty level in using mobile banking which will increase the level of customer satisfaction towards mobile banking.

## **References**

- [1] Internet World Stats, “Internet growth statistics,” 2019, <https://www.internetworldstats.com/emarketing.htm>.

- [2] S. D. Vyas, "Impact of e-banking on traditional banking services," *Int. J. Comput. Sci. Commun. Networks*, vol. 2, no. 3, pp. 310–313, 2012.
- [3] A. Chan, G. P. Ling, V. Brown, and I. A. Mohd Ali "More opting for e-banking," 2017, <https://www.thestar.com.my/news/nation/2017/04/12/more-opting-for-e-banking-banks-feel-move-assures-cost-savings-for-malaysians/>.
- [4] The Malaysian Reserve, "Smartphone penetration to exceed 100% by 2018," 2017, <https://themalaysianreserve.com/2017/04/03/smartphone-penetration-to-exceed-100-by-2018/>.
- [5] J. Sidhu, "Banking on digital world," *The Star*, 2016.
- [6] Webpals, "Fintech-versus-banking-fintech-mobile-apps-banks," 2018, <https://www.webpals.com/mobile/fintech-versus-banking-fintech-mobile-apps-banks/>.
- [7] F. Mohsan, M. M. Nawaz, M. S. Khan, Z. Shaukat, and N. Aslam, "Impact of customer satisfaction on customer loyalty and intentions to switch: Evidence from banking sector of Pakistan," *Int. J. Bus. Soc. Sci.*, 2, no. 16, 2011, pp. 263-270.
- [8] D. Cohen, C. Gan, H. h. A. Yong, and E. Chong, "Customer retention by banks in New Zealand," *Banks and Bank Systems*, vol. 2, no. 1, pp. 40-55, 2007.
- [9] V. Fong, "Fintech Malaysia Report 2018 – The State of play for Fintech Malaysia," 2018, <https://fintechnews.my/17922/editors-pick/fintech-malaysia-report-2018/>.
- [10] F. L. Isac, "Theories of consumer's satisfaction and the rationalization of the expectation disconfirmation paradigm," *Annals - Economy Series*, Constantin Brancusi University, Faculty of Economics, vol. 2, pp. 82-88.
- [11] R. E. Anderson, "Consumer dissatisfaction: The effect of disconfirmed expectancy on perceived product performance," *J. Mark. Res.*, 10, no. 1, 1973, pp. 38-44.
- [12] J. C. Olson and P. A. Dover, "Disconfirmation of consumer expectations through product trial," *J. Appl. Psychol.*, 64, no. 2, 1979, pp. 179-189.
- [13] J. Modest, "Theories of customer satisfaction," 2010, [https://www.academia.edu/23126292/THEORIES\\_OF\\_CUSTOMER\\_SATISFACTION](https://www.academia.edu/23126292/THEORIES_OF_CUSTOMER_SATISFACTION).
- [14] R. Danijela, V. Jasminka, and D. Srecko, "Customer satisfaction impact on banking services and relationship management innovation," *Int. Rev.*, vol. 1, no. 2, pp. 83–93, 2015.
- [15] Y. Yi, "A critical review of customer satisfaction," *Rev. Mark. Chicago Am. Mark. Assoc.*, vol. 4, pp. 68–123, 1990.
- [16] R. L. Oliver and W. S. DeSarbo, "Response determinants in satisfaction judgments," *J. Consum. Res.*, 14, no. 4, 1988, pp. 495-507.
- [17] R. N. Cardozo, "An experimental study of customer effort, expectation, and satisfaction," *J. Mark. Res.*, 2, no. 3, 1965, pp. 244-249.
- [18] V. A. Zeithaml, M. J. Bitner, and D. D. Gremler, "Services Marketing: Integrating Customer Focus Across the Firm," McGraw-Hill, New York, 2018.
- [19] G. Daragahi, "The impact of innovation on customer satisfaction: A study of the cosmetics producer in Tehran," *Int. Rev.*, 1-2, 2017, pp. 121-132.
- [20] T. H. Thurau and A. Klee, "The impact of customer satisfaction and relationship quality on customer retention: A critical reassessment and model development," *Psychol. Mark.*, 14, no. 8, 1997, pp. 737-764.
- [21] M. Jannat and I. Ahmed, "Factors influencing customer satisfaction of mobile banking services: A study on second - generation banks," *Eur. J. Bus. Manag.*, 7, no. 26, 2015, pp. 88-96.
- [22] G. Armstrong, S. Adam, S. Denize, and P. Kotler, "Principles of Marketing," Pearson Australia, 2014.
- [23] A. Eshghi, D. Haughton, and H. Topi, "Determinants of customer loyalty in the wireless telecommunications industry," *Telecomm. Policy*, 31, no. 2, 2007, pp. 93-106.
- [24] A. Gustafsson, M. D. Johnson, and I. Roos, "The effects of customer satisfaction, relationship commitment dimensions, and triggers on customer retention," *J. Mark.*, 69, no. 4, 2005, pp. 210-218.
- [25] W. G. Zikmund, J. C. Carr, B. Babin, and M. Griffin, "Business Research Methods," Nelson Education, Scotland, 2013.
- [26] U. Sekaran and R. Bougie, "Business Research Methods: A Skill-Building Approach," John Wiley and Sons, New Jersey, 2011.
- [27] J. F. Hair, M. Wolfinger, A. H. Money, P. Samouel, and M. J. Page, "Essentials of Business Research Methods," Routledge, Abingdon, 2015.
- [28] G. Ursachi, I. A. Horodnic, and A. Zait, "How reliable are measurement scales? External factors with indirect influence on reliability estimators," *Procedia Econ. Financ.*, 20, 2015, pp. 679-686.