dependent variable. However the correlation analysis has been conducted to examine the relationship between the variables (Jahangir, 2008). As cited in (Alain, 2010) the correlation coefficient value (r) range from 0.10 to 0.29 is considered weak, from 0.30 to 0.49 is considered medium and from 0.50 to 1.0 is considered strong.

CHAPTER 4: RESEARCH RESULTS

4.1 INTRODUCTION

The research results are presented after conducting reliability test where Cronbach's Alpha that suggests internal consistency reliability for the scale with this sample is calculated. The strength of the relationship between the Variables was explored using Pearson correlation. The predictive ability of these variables, all the facets on adoption behavior was measured using multiple regressions. Lastly t-test and Anova were used to test the effect of some of the demographic profile collected on the variables.

4.2 DEMOGRAPHIC PROFILE

Table 4.1 summarizes some of the demographics of the respondents. The descriptive statistics shows a fairly young and well educated population with more than 80 percent of the respondents is below forty years old while 75.5 percent of them have at least degree qualification. 90.1 percent of them who are earning at least RM2000.00 of employment income. In terms of gender, the population is not divided equally between male and female respondents. Most of the respondents are from female category which is 62.1 percent and male are being the rest of the respondents.

This group of respondents generally depicts the real ethnic proportion of Malaysia with ratio of approximately 39.2% Malay, 23.1% Chinese and 29.7% Indian and 8% others. The 2000 Census figures show that the Bumiputera community made up 61.2 percent of the population and followed by Chinese, Indians and Others are the minority in the ethnic chat.

Table 4.1 Demographic attributes of the respondents.

	Demographics	Frequency	Percent (%)
Gender	Male	101	47.6
	Female	111	52.4
Ethnic group	Malay	83	39.2
	Indian	63	29.7
	Chinese	49	23.1
	Others	17	8.0
Age	21-30 years	113	53.3
	31-40 years	62	29.2
	41-50 years	30	14.2
	51-60 years	7	3.3

Level of education	Secondary school	18	8.5
	Diploma	30	14.2
	Bachelor degree	145	68.4
	Post graduate degree	15	7.1
	Others	4	1.9
Occupation	Professional	72	34.0
	Manager	34	16.0
	Executive	85	40.1
	Clerical staff	19	9.0
	Others	2	0.9
Monthly income	Below RM2,000	21	9.9
	RM2,000-RM4,000	155	73.1
	RM4,001-RM6,000	29	13.7
	RM6,001-RM8,000	5	2.4
	Above RM8,000	2	0.9

4.3 ANALYSES MEASURE

4.3.1 RELIABILITY TEST

Table 4.2 Reliability Statistics.

Reliability Statistics		
variable	**Cronbach's Alpha**	**N of Items**
Quality Internet Connection	.770	3
Information Online Banking	.952	2
Perceived Usefulness	.955	6

Perceived Ease of Use	.962	6
Perceived Enjoyment	.916	5
Security and Privacy	.767	6
Behavioral Intention to Use	.969	3
Attitude Towards Using	.847	4
Trust	.959	5
Triability/Observability	.815	5
Reliability	.840	2
Government Support	.935	4

The alpha values were calculated to assess the internal consistency reliabilities of the scales. Ideally Cromnbach alpha coefficient of scale should be above 0.7 for it to be acceptable (Pallant, 2007). It is of evidence that the cronbach alpha value for the twelve factors in this study ranged from 0.76 to 0.96. Cronbach alpha scores shown in table 4.2 indicated that each risk facet exhibit strong internal reliability.

4.3.2 VALIDITY TEST

Table 4.4.2 Validity Statistics.

Variables	**Items**	**(r)**
Quality Internet Connection	QIC1	.870**
	QIC2	.861**
	QIC3	.776**
Information Online Banking	IOB1	.976**
	IOB2	.978**
Perceived Usefulness	PU1	.854**
	PU2	.924**
	PU3	.898**
	PU4	.919**
	PU5	.925**

Perceived Ease of Use	PEU1	.924**
	PEU2	.920**
	PEU3	.869**
	PEU4	.911**
	PEU5	.940**
	PEU6	.934**
Perceived Enjoyment	PE1	.867**
	PE2	.909**
	PE3	.866**
Security and Privacy	SP1	.762**
	SP2	.591**
	SP3	.656**
	SP4	.787**
	SP5	.461**
	SP6	.824**
Behavioral Intention to Use	BI1	.967**
	BI2	.976**
	BI3	.967**
Attitude Towards Using	ATT1	.761**
	ATT2	.915**
	ATT3	.721**
	ATT4	.913**
Trust	TR1	.928**
	TR2	.925**
	TR3	.930**
	TR4	.923**
	TR5	.935**
Triability/Observability	TRI1	.884**
	TRI2	.871**
	TRI3	.889**
	TRI4	.590**
	TRI5	.513**
Reliability	REL1	.925**
	REL2	.932**
Government Support	GS1	.916**
	GS2	.919**
	GS3	.926**
	GS4	.887**

The product moment correlation test was conducted on the items and found that Quality Internet Connection, Information Online Banking , Perceived Ease of Use, Perceived

Usefulness, Perceived Enjoyment Security and Privacy, Trust, Triability / Observability , Reliability, Government Support, Attitude Towards Using and Behavioral Intention to Use are significant items in the overall index with strong influence.

4.3.3 FREQUENCY TEST FOR PART ONE OF THE QUESTIONNAIRE.

Table 4.4: Online usage of the respondents

I use online bank mainly	**Frequency**	**Percent (%)**
I do not use	42	19.8
At home	123	58.0
At work	32	15.1
In a bank	11	5.2
In a friend place	1	.5
In another place	3	1.4
Total	212	100.0

The above table shows the frequency of question (I use online bank mainly), 42 people or (19.8 %) of the respondents have answered I do not use , 123 people or (58.0 %) are using the online banking facility at home, 32 respondents or (15.1 %) are using the online banking facility at work, 11 respondents or (5.2 %) are using in the bank, 1 respondent or (0.5 %) is using online banking in friends place and the balance of 3 respondents or (1.4 %) is using the online facility from another place.

Table 4.5: Average Online banking usage by the respondents

On average I use online bank	Frequency	Percent (%)
Once in a month	64	37.6
Twice in a month	53	31.2
Three times in a month	24	14.1
Four times in a month	13	7.6
Five times in a month	8	4.7
Ten tine in a month	3	1.8
More than ten times in a month	5	2.9
Total	170	100.0

The above table shows the frequency of question for " On average I use online bank", 64 of the respondents or (37.6 %) are using once in a month, 53 of the respondents or (31.2 %) are using twice in a month, 24 respondents or (14.1 %) is using three times in a month , 13 respondents or (7.6 %) are using four times in a month, 8 respondents or (4.7 %) are using five times in a month, 3 respondents or (1.8 %) using online transactions ten times in a month and 5 respondents or (2.9 %) are using online banking more than 10 times

Table 4.6: Average number of online banking transactions in a month by the respondents

On average I do ____ transaction(s) a month	Frequency	Percent (%)
One	49	28.8
Two	41	24.1
Three	31	18.2
Four	21	12.4
Five	21	12.4
Ten	1	.6
More than ten	6	3.5
Total	170	100.0

The above table shows the frequency of question " On average I do ____ transaction(s) a month", 49 respondents or (28.8 %) are doing one transaction in a month, 41 respondents

or (24.1 %) are doing two transactions in a month, 31 respondents or (18.2 %) are doing three transactions in a month, 21 respondents or (12.4 %) are doing four transactions in a month, 21 respondents or (12.4 %) are doing five transaction in a month, ten of the respondents or (0.6 %) are doing ten transactions in a month and 6 respondents or (3.5 %) is doing more than ten transactions in a month.

Table 4.7: The type of online banking services used by the respondents (Primary current account).

Primary current account	**Frequency**	**Percent (%)**
Never	117	55.2
Almost never	6	2.8
Neutral	24	11.3
Almost always	43	20.3
Always	22	10.4
Total	212	100.0

The above table shows the frequency of question "Primary current account", 117 respondents (55.2 %) are not using current account facilities. Respondents who Almost never use are 6 or (2.8 %), 24 respondents or (11.3 %) are neutral , 43 of respondents which are equals to (20.3 %) are Almost always using the current account facilities and 22 of respondents or (10.4 %) are always using the currents account facilities provided by the bank.

Table 4.8: The type of online banking services used by the respondents (Credit, Investment, and Insurance)

	Credit base services		Investment base services		Insurance base services	
	Frequency	**Percent**	**Frequency**	**Percent**	**Frequency**	**Percent**
Never	65	30.7	163	76.9	150	70.8
Almost never	11	5.2	18	8.5	12	5.7
Neutral	25	11.8	17	8.0	15	7.1
Almost always	90	42.5	10	4.7	28	13.2
Always	21	9.9	4	1.9	7	3.3
Total	212	100.0	212	100.0	212	100.0

The above table shows the frequency of question for type of online banking services used by the respondents for Credit base services, 65 respondents (30.7 %) are not using Credit base services, Almost never are 11 respondents (5.2 %), 25 respondents or (11.8 %) are neutral, 90 of respondents which equals to (42.5 %) are Almost always using the Credit base services and 21 of respondents or (9.9 %) are always using the Credit base services provided by the bank.

For Investment base services, 163 respondents (76.9 %) are not using Investment base services, Almost never are 18 respondents (8.5 %), 17 respondents or (8.0 %) are neutral, 10 of respondents which equals to (4.7 %) are Almost always using the Investment base

services and 4 of respondents or (1.9 %) are always using the Investment base services provided by the bank.

For Insurance base services, 150 respondents (70.8 %) are not using insurance base services, Almost never are 12 respondents (5.7 %), 15 respondents or (7.1 %) are neutral, 28 of respondents which equal to (13.2 %) are Almost always using the Investment base services and 7 of respondents or (3.3 %) are always using the Investment base services provided by the bank.

Table 4.9: Frequency of receiving Information about online banking by the respondents.

I have received information about using an online bank from	Frequency	Percent (%)
A bank	98	46.2
A phone bank	5	2.4
The internet	46	21.7
A friend	26	12.3
An advertisement	20	9.4
Another source	3	1.4
I don't know	14	6.6
Total	212	100.0

The above table shows the frequency of question " I have received information about using an online bank from" , It shows that most of the respondents received information about online banking form financial institutions itself which comprises of 46.2% and followed by internet which is 21.7% .

4.3.4 MULTIPLE REGRESSION TEST

Table 4.10: Effect of Variables on the Attitude Towards Using online banking facilities.

Variables	Attitude Towards Using		t	*p*
	B	*β*		

Variables	Attitude Towards Using		t	*p*
Quality Internet Connection	.106	.071	1.652	.101
Information Online Banking	-.131	-.065	-1.267	.207
Perceived Usefulness	.212	.355	4.932	.000
Perceived Ease of Use	.085	.140	1.963	.050
Perceived Enjoyment	-.014	-.017	-.248	.804
Security and Privacy	.137	.186	3.257	.001
Trust	.274	.327	5.174	.000
Triability/Observability	.054	.056	1.098	.274
Reliability	-.181	-.094	-2.341	.021
Government Support	-.009	-.007	-.156	.877
R^2=.804 (80.4 %) and F=64.081 with $p<0.05$				

By using multiple regression test, the above schedule shows a significant regression model between Government Support, Reliability, Quality Internet Connection, Triability/Observability, Information Online Banking, Security and Privacy, Perceived Usefulness, Trust, Perceived Enjoyment, Perceived Ease of Use to Attitude Towards Using, in which the value F = 64.081 with p <0.05. The model of this regression equation, predictor variables to give a donation of 80.4 % to Attitude Towards Using. As seen the power of each predictor variable, which suggests the dominance of the highest are at the scale of Trust (t =- 2787), Perceived Usefulness scale (t = 4.932), the scale of Security and Privacy (t = 3.257), the scale Reliability (t=-2.341) and the scale of Perceived Ease of Use (t=1.963). Whenever Perception of scale Quality Internet Connection (t =1.652), Information Online Banking (t =-1.267), Perceived Enjoyment (t =-.248), Triability/Observability (t =1.098) and Government Support (t =-.156) did not give significant impact towards the attitude of online banking.

Table 4.11: Effect of Attitude Towards Using on Behavioral Intention to Use

Variables	Behavioral Intention to Use		t	*p*
	B	*β*		
Attitude Towards Using	.843	.874	26.020	.000
R^2=.763 (76.3 %) and F=677.043 with *p<0.05*				

By using multiple regression test, the above schedule shows a significant regression model between Attitude Towards Using to Behavioral Intention to Use, in which the value F = 677.043 with p <0.05. The model of this regression equation, predictor variables to give a donation of 76.3 % to Behavioral Intention to Use.

4.3.5 Correlations

Table 4.12: The relationship between variables and Attitude Towards Using.

Variable	Attitude Towards Using	
	r	*p*
Quality Internet Connection	.550**	.000
Information Online Banking	.630**	.000
Perceived Usefulness	.830**	.000
Perceived Ease of Use	.759**	.000
Perceived Enjoyment	.692**	.000
Security and Privacy	.695**	.000
Behavioral Intention to Use	.874**	.000
Trust	.812**	.000
Triability/Observability	.587**	.000
Reliability	-.104	.182

Government Support	.480**	.000

The above correlation test result shows relationship exists between all the variables with Attitude Towards Using except Reliability where the value of r is more than $.480^{**}$ with $p<0.05$. However Reliability with Attitude Towards Using is only showing value of r = -.104 with $p>0.05$.

Table 4.13: The relationship between variables and Behavioral Intention to Use.

Variable	Behavioral Intention to Use	
	r	p
Quality Internet Connection	.564**	.000
Information Online Banking	.719**	.000
Perceived Usefulness	.788**	.000
Perceived Ease of Use	.695**	.000
Perceived Enjoyment	.643**	.000
Security and Privacy	.720**	.000
Attitude Towards Using	.874**	.000
Trust	.779**	.000
Triability/Observability	.535**	.000
Reliability	-.165**	.033
Government Support	.477**	.000

The above correlation test result shows relationship exists between all the variables with Behavioral Intention to Use except Reliability, where the value of r is more than .477** with $p<0.05$. However Reliability with Behavioral Intention to Use is only showing value of r = -.165 with $p>0.05$.

Table 4.14: The relationship between variables and Quality Internet Connection.

Variable	Quality Internet Connection	
	r	*p*

Information Online Banking	.580**	.000
Perceived Usefulness	.522**	.000
Perceived Ease of Use	.450**	.000
Perceived Enjoyment	.397**	.000
Security and Privacy	.448**	.000
Trust	.476**	.000
Reliability	.118	.130
Government Support	.318**	.000

The above correlation test result shows relationship exists between all the variables with Quality Internet Connection except Reliability, where the value of r is more than .318** with $p<0.05$. However Reliability with Quality Internet Connection is only showing value of r = .118 with $p<0.05$.

Table 4.15: The relationship between variables and Information on Online Banking

Variable	Information on Online Banking	
	r	*p*
Perceived Usefulness	.522**	.000
Perceived Ease of Use	.681**	.000
Perceived Enjoyment	.405**	.000
Security and Privacy	.538**	.000

Trust	.572**	.000
Triability/Observability	.408**	.000
Reliability	.005	.947
Government Support	.504**	.000

The above correlation test result shows relationship exists between all the variables with Information on Online Banking except Reliability, where the value of r is more than . 405** with $p<0.05$. However Reliability with Information on Online Banking is only showing value of r = .005 with $p>0.05$.

Table 4.16: The relationship between variables and Perceived Usefulness

Variable	Perceived Usefulness	
	r	*p*
Perceived Ease of Use	.811**	.000
Perceived Enjoyment	.685**	.000
Security and Privacy	.540**	.000
Trust	.697**	.000
Triability/Observability	.629**	.000
Reliability	.014	.856
Government Support	.460**	.000

The above correlation test result shows relationship exists between all the variables with Perceived Usefulness except Reliability, where the value of r is more than .460** with *p<0.05*. However Reliability with Information on Online Banking is only showing value of r = .014 with *p>0.05*.

Table 4.17: The relationship between variables and Perceived Ease of Use

Variable	Perceived Ease Of Use	
	r	*p*
Perceived Enjoyment	.754**	.000
Security and Privacy	.525**	.000
Trust	.664**	.000
Triability/Observability	.599**	.000
Reliability	-.059	.469
Government Support	.454**	.000

The above correlation test result shows relationship exists between all the variables with Perceived Ease Of Use except Reliability, where the value of r is more than .454** with *p<0.05*. However Reliability with Perceived Ease Of Use is only showing value of r = -.059 with *p>0.05*.

Table 4.18: The relationship between variables with Perceived Enjoyment

Variable	Perceived Enjoyment	
	r	*p*
Security and Privacy	.638**	.000
Trust	.716**	.000
Triability/Observability	.585**	.000
Reliability	-.066	.398
Government Support	.486**	.000

The above correlation test result shows relationship exists between all the variables with Perceived Enjoyment except Reliability, where the value of r is more than .486** with $p<0.05$. However Reliability with Perceived Enjoyment is only showing value of r = -.066 with $p>0.0$.

Table 4.19: The relationship between variables with Security and Privacy

Variable	Security and Privacy	
	r	*p*
Trust	.700**	.000
Triability/Observability	.401**	.000
Reliability	-.110	.158
Government Support	.536**	.000

The above correlation test result shows relationship exists between all the variables with Security and Privacy except Reliability, where the value of r is more than .401** with $p<0.05$. However Reliability with Security and Privacy is only showing value of r = -.110 with $p>0.0$.

Table 4.20 The relationship between variables with Trust

	Security and Privacy	
Variable	Trust	
Variable	r	*p*
Triability/Observability	.579**	.000
Reliability	-.019	.810
Government Support	.530**	.000

The above correlation test result showed relationship exists between all the variables with Trust except Reliability, where the value of r is more than .530** with $p<0.05$. However Reliability with Trust is only showing value of r = -.019 with $p>0.05$

Table 4.21 The relationship between variables with Triability/Observability

	Triability/Observability	
Variable	r	*p*
Reliability	.222**	.004
Government Support	.486**	.000

The above correlation test result shows relationship exists between both of the variables with Triability/Observability, where the value of r is more than .222** with $p<0.05$.

Table 4.22: The relationship between variable with Reliability

Variable	Reliability	
	r	*p*
Government Support	.223**	.004

The above correlation test result shows relationship exists between Government Support and Reliability, where the value of r is more than .223** with $p<0.05$.

4.3.6 T-Test

Table 4.23: The difference of Attitude Towards Using between Male and Female

Gender	**N**	**Mean**	**Std. Deviation**	**df**	**t**	***p***
Male	101	14.75	3.02	209	-.429	.668
Female	111	14.93	2.94			

In the table above using t test, there is no difference in the Attitude Towards Using between Male (M = 14.75, Sd 3.02) and Female (M =14.93, Sd 2.94), value of t = -.429 with p> 0.05.

Table 4.24: The difference of Behavioral Intention to Use between Male and Female

Gender	**N**	**Mean**	**Std. Deviation**	**df**	**t**	***p***
Male	101	11.91	2.94	209	.010	.992
Female	111	11.90	2.83			

In the table above using t test, there was no difference in the Behavioral Intention to Use between Male (M = 11.91, Sd 2.94) and Female (M =11.90, Sd 2.83), value of t = .010 with p> 0.05.

4.3.7 One-way Anova

Table 4.25: The difference of Attitude towards Using by Ethnic group

Sources of variation	Sum of Squares	df	Mean Square	F	*p*
Between Groups	65.235	2	32.617	4.022	.019
Within Groups	1557.053	192	8.110		
Total	1622.287	194			

In the table above using one-way ANOVA test, there was difference in the Attitude Towards Using by Ethnic group, Malay (M = 14.30), Chinese (M =14.88), Indian (M =15.65), value of F = 4.022 with p< 0.05. The collection is as impressive distinction between Malay (mean = 14.30) with Indian (mean =15.65).

Table 4.26: The difference of Behavioral Intention to Use By Ethnic group

Sources of variation	Sum of Squares	df	Mean Square	F	p
Between Groups	42.028	2	21.014	2.699	.070
Within Groups	1494.711	192	7.785		
Total	1536.738	194			

In the table above using one-way ANOVA test, there is no difference in the Behavioral Intention to Use by Ethnic group, Malay (M = 11.51), Chinese (M =11.69), Indian (M =12.55), value of F = 2.699 with p>0.05.

Table 4.27: The difference of Attitude towards Using by Age

Sources of variation	Sum of Squares	df	Mean Square	F	p
Between Groups	224.280	2	112.140	14.383	.000
Within Groups	1629.475	209	7.797		
Total	1853.755	211			

In the table above using one-way ANOVA test, there is difference in the Attitude towards Using by Age, 21-30 years (M = 15.33), 31-40 years (M =15.34), Above 41 years (M =12.62), value of F = 14.383 with p< 0.05. The collection is as impressive distinction between 31-40 years (mean =15.34) with Above 41 years (mean =12.62).

Table 4.28: The difference of Behavioral Intention to Use By Age

Sources of variation	Sum of Squares	df	Mean Square	F	p
Between Groups	230.214	2	115.107	16.070	.000
Within Groups	1497.083	209	7.163		
Total	1727.297	211			

In the table above using one-way ANOVA test, there is difference in the Behavioral Intention to Use By Age, 21-30 years (M = 12.44), 31-40 years (M =12.29), Above 41 years (M =9.65), value of F = 16.070 with p< 0.05. The collection is as impressive distinction between 21-30 years (mean = 12.44) with Above 41 years (mean =9.65).

Table 4.29: The difference of Attitude towards Using by Occupation

Sources of variation	Sum of Squares	df	Mean Square	F	p
Between Groups	302.059	3	100.686	13.373	.000
Within Groups	1550.936	206	7.529		
Total	1852.995	209			

In the table above using one-way ANOVA test, there is difference in the Attitude towards Using by Occupation, Clerical staff (M = 11.84), Executive (M =12.29), Professional (M =15.49), Manager (mean =16.41), value of F = 13.373 with p< 0.05. The collection is as impressive distinction between Clerical staff (mean = 11.84) with Executive (mean =12.29), between Clerical staff (mean = 11.84) with Professional (mean =15.49), between Clerical staff (mean = 11.84) with Manager (mean =16.41), between Executive (mean =12.29) with Manager (mean =16.41).

Table 4.30: The difference of Behavioral Intention to Use by Occupation

Sources of variation	Sum of Squares	df	Mean Square	F	p
Between Groups	380.235	3	126.745	19.506	.000
Within Groups	1338.546	206	6.498		
Total	1718.781	209			

In the table above using one-way ANOVA test, there is difference in the Behavioral Intention to Use By Occupation, Clerical staff (M = 9.10), Executive (M =11.10), Professional (m =12.72), Manager (M =13.85), value of F = 19.506 with p< 0.05. The collection is as impressive distinction between Clerical staff (M = 9.10) with Executive (M =11.10), between Clerical staff (M = 9.10) with Professional (M =12.72), between

Clerical staff (M = 9.10) with Manager (M =13.85), between Executive (M =11.10) with Manager (M =13.85).

4.3.8 Crosstabs Analysis

Table 4.31 Relationship between Behavioral with Highest level of education

Highest level of education	Behavioral Intention to Use						Total	
	Low Level (3-7)		Medium Level (8-11)		High Level (12-15)			
	N	%	N	%	N	%	N	%
Secondary school	2	11.1	12	66.7	4	22.2	18	100.0
Diploma	5	16.7	15	50.0	10	33.3	30	100.0
Bachelor degree	7	4.8	33	22.8	105	72.4	145	100.0
Post graduate degree	0	.0	5	33.3	10	66.7	15	100.0
Others	0	.0	1	25.0	3	75.0	4	100.0
χ^2=32.388 with p<0.05								

Based on the crostabulation with Chi square test as stated above, there is a relationship between Highest level of education with Behavioral Intention to Use, whereby the value of χ^2=32.388 with p<0.05.There are 2 respondent (11.1%) with Secondary school education with Behavioral Intention to Use at lower level (3-7), 12 respondents or 66.7% for medium level (8-11) and 4 respondents or 22.2% for higher level. Respondents with Diploma level education with lower level (3-7) Behavioral Intention to Use are 5

(16.7%), medium level (8-11) are 15 people (50%), higher level (12-15) are 10 people (33.3%). There are 7 respondents (4.8%) with Bachelor Degree education with Behavioral Intention to Use at lower level (3-7), 33 respondents (22.8%) for medium level (8-11) and 105 respondents (72.4%) for higher level. Respondent with Post graduate degree with medium level Behavioral Intention to Use is 5 (33.3%), higher level (12-15) is 10 people (66.7%). There is 1 respondent (25%) with other education with Behavioral Intention to Use at medium level (8-11), 3 respondents (75%) for higher level.

Table 4.32 Relationship Behavioral Use with Monthly income

Monthly income	Behavioral Intention to Use						Total	
	Low Level (3-7)		Medium Level (8-11)		High Level (12-15)			
	N	%	N	%	N	%	N	%
Below RM2,000	2	9.5	12	57.1	7	33.3	21	100.0
RM2,000-RM4,000	12	7.7	46	29.7	97	62.6	155	100.0
RM4,001-RM6,000	0	.0	7	24.1	22	75.9	29	100.0
RM6,001-RM8,000	0	.0	1	20.0	4	80.0	5	100.0
Above RM8,000	0	.0	0	.0	2	100.0	2	100.0
χ^2=13.296 with p>0.05								

Based on the crostabulation with Chi square test as stated above, there are no relationship between Monthly income with Behavioral Intention to Use, whereby the value of χ^2=13.296 with p>0.05.There are 2 respondents (9.5%) with Monthly income Below RM2,000 with Behavioral Intention to Use at lower level (3-7), 12 respondents or 57.1% for medium level (8-11) and 7 respondents or 33.3% for higher level. Respondents with Monthly income RM2,000-RM4,000 with lower level (3-7) Behavioral Intention to Use are 12 people (7.7%), medium level (8-11) are 46 people (29.7%), higher level (12-15) are 97 people (62.6%). There are 7 respondents (24.1%) with Monthly income RM4,001-RM6,000 with Behavioral Intention to Use at medium level (8-11), 22 respondents (75.9%) for higher level (12-15). Respondents with Monthly income RM6,001-RM8,000 with medium level (8-11) Behavioral Intention to Use is 1 (20.0%), higher level (12-15) are 4 people (80%), There are 2 respondents (100%) with Monthly income Above RM8,000 with Behavioral Intention to Use at higher level (12-15).

Table 4.33 Relationship between Attitude Towards Using with level of education

Highest level of education	Attitude Towards Using						Total	
	Low Level (4-9)		Medium Level (10-14)		High Level (15-20)			
	N	%	N	%	N	%	N	%
Secondary school	2	11.1	12	66.7	4	22.2	18	100.0
Diploma	4	13.3	17	56.7	9	30.0	30	100.0
Bachelor degree	5	3.4	34	23.4	106	73.1	145	100.0
Post graduate degree	0	.0	4	26.7	11	73.3	15	100.0
Others	0	.0	1	25.0	3	75.0	4	100.0
χ^2=35.502 with p<0.05								

Based on the crostabulation with Chi square test as stated above, there is a relationship between Highest level of education with Attitude Towards Using, whereby the value of

χ^2=35.502 with p<0.05.There are 2 respondent (11.1%) with Secondary school education with Attitude Towards Using at lower level (4-9), 12 respondents or 66.7% for medium level (10-14) and 4 respondents or 22.2% for higher level (15-20). Respondents with Diploma level education with lower level (4-9) Attitude Towards Using are 4 (13.3%), medium level (10-14) are 17 people (56.7%), higher level (15-20) are 9 people (30.0%). There are 5 respondents (3.4%) with Bachelor Degree education with Attitude Towards Using at lower level (4-9), 34 respondent (23.4%) for medium level (10-14) and 106 respondent (73.1%) for higher level. Respondent with Post graduate degree with medium level (10-14) Attitude Towards Using are 4 (26.7%), higher level (12-15) is 11 people (73.3%). There is 1 respondent (25%) with other education with Attitude Towards Using at medium level (10-14), 3 respondents (75%) for higher level.

Table 4.34 Relationship between Attitude Towards Using with Monthly income

Monthly income	Attitude Towards Using						Total	
	Low Level (4-9)		Medium Level (10-14)		High Level (15-20)			
	N	%	N	%	N	%	N	%
Below RM2,000	2	9.5	12	57.1	7	33.3	21	100.0
RM2,000-RM4,000	9	5.8	49	31.6	97	62.6	155	100.0
RM4,001-RM6,000	0	.0	7	24.1	22	75.9	29	100.0
RM6,001-RM8,000	0	.0	0	.0	5	100.0	5	100.0
Above RM8,000	0	.0	0	.0	2	100.0	2	100.0
χ^2=14.922 with p>0.05								

Based on the crostabulation with Chi square test as stated above, there are no relationship between Monthly income with Behavioral Intention to Use, whereby the value of

χ^2=14.922 with p>0.05. There are 2 respondents (9.5%) with Monthly income Below RM2,000 with Attitude Towards Using at lower level (4-9), 12 respondents or 57.1% for medium level (10-14) and 7 respondents or 33.3% for higher level (15-20). Respondents with Monthly income RM2,000-RM4,000 with lower level (10-14) Attitude Towards Using are 9 people (5.8%), medium level (10-14) are 49 people (31.6%), higher level (15-20) are 97 people (62.6%). There are 7 respondents (24.1%) with Monthly income RM4,001-RM6,000 with Attitude Towards Using at medium level (10-14), 22 respondents (75.9%) for higher level (15-20). Respondents with Monthly income RM6,001-RM8,000 with higher level (15-20) Attitude Towards Using are 5 (100.0%). There are 2 respondents (100%) with Monthly income Above RM8,000 with Attitude Towards Using at higher level (15-20).

4.4 TESTING OF HYPOTHESES AND RESEARCH RESULT

This paper research has empirically validated the proposed research model. All the hypotheses regarding the relationship between the variables and independent variables are developed and tested by using reliability, validity, multiple regression and correlation test. In general, the results partially supported the developed hypothesized relationships. The significant effect influencing attitude in using the online banking are from trust, security and privacy, perceived usefulness, perceived ease of use and reliability. However, we found that some of the items are not significant in influencing the attitude in adoption of online banking namely internet connection, amount of information, government support, perceived enjoyment, and triability / observability. Apart from that the finding also are showing that the mediating variable (attitude) is significantly influencing the behavior of respondents in adopting online banking.

H1: Perceived Usefulness positively influence attitude towards online banking.

As point out previously, perceived usefulness is found to be a significant factor in determine attitude to adopt the online banking. This is similar to the TAM model, which has been applied in most of prior technology adoption studies; users will adopt

technology if they find it useful. Therefore banks in Malaysia should try to inform their customers know the benefits of using online banking compared traditional way of banking. Some of the key benefits in using online banking are such as being more productive and easier communications to the bank staffs. Consumers are willing to adopt online banking when they know the advantages of it compared to traditional way of banking. Therefore banks should further explore the nature of features which currently financial institution's users find useful or they will find useful and promote such features to encourage more customers to adopt online banking.

H2: Perceived Ease of Use positively influence attitude towards online banking.

Base on the relationship with attitude to use, the findings in this study show that perceived ease of use has significant effect on attitude to adoption online banking banking. These results are also support by the earlier studies (Jahangir, 2008);(Amin, 2007); (Shih, 2004); (Alain, 2010). However, it is contradicts with (Tero Pikkarainen, 2004) finding, which says there is no significant impact of perceived ease of use on the attitude in adoption's to use the online banking. This result also supported the original TAM models. Most of the participant in the studies is from the age group of 21 to 30 which is 113 respondents or equal 53.3% (Table 3.3). Current young generation are more IT savvy if compare with elderly generation and their attitude of willing to lean the online banking quite are fast compare with the other group of respondents. Apart from that, the competitive environment of banking creates a perfect atmosphere for the new

learners by giving clear instructions. Therefore the finding support the second hypotheses which says that learn online banking easily and ease of use will not be a barrier to their adoption of internet banking.

H9: Security and privacy positively influence attitude towards online banking.

As indicated earlier Security is found to be a significant factor in determine the attitude in adopting the online banking. This analysis is in aligning of prior findings. According to (Sathye, 1999) 70% of customers expressed their concerns on security. (Cheng 2005) found that web security was significant predictor of customer's intentions to use internet banking. (Rotchanakitumnuai, 2003) found out that customers normally do not accept internet technology for three reasons: security of the system, distrust of service providers, and worries about the reliability of the service. The more the users are confident about the banks and about technology the more they will be using online banking. Therefore banks can increase users' confidence by including undertaking in the banking agreement that they indemnify the losses incurred through unauthorized use (Sathye, 1999). Such actions can build users' confidence on banks.

H10: Trust positively influence attitude towards online banking.

As point out, the findings are also showing that trust found to be a significant factor in determine the attitude to adopt the online banking. These results are also support by the

earlier studies by (Khalil Md Nor, 2007); (Suh, 2002) indicated that trust plays an important role when financial transactions are involved. Therefore users especially from developing countries will be more cautious as they are more used to conducting monetary transaction face to face. According to (Wang and Barnes, 2007), to built the trust level on customers, banks can adopt with the trust building strategies such including advertising campaign, privacy guarantee, company guarantee policy and statement (Wei, 2009) to gain the confidence of users on online banking.

H4: Perceived Reliability positively influence attitude towards online banking.

Based on the finding reliability is showing a significant outcome in determine the attitude to adopt the online banking. These results are also support by the earlier studies by (Mary Loonam, 2008); Disappointment of online banking users during poor e- banking reliability situations will lead them to switch to another competitor service providers.

However based on the gathered data and analysis there were five other constructs did not significantly influence the attitude in the adoption online banking. Namely internet connection, amount of information, government support, perceived enjoyment, and triability / observability.

H6: Government support not positively influence attitude towards online banking.

This is actually contradicts the finding by (Tan M. a., 2000); (Jaruwachirathanakul, 2005) which government support is found to be a significant determinant to predict the attitude to use the online banking. Malaysia Japan and Singapore are countries that provides good IT infrastructure to the residents (Chong , 2008). This is in align with the government's effort in promoting Penang State (in Malaysia) government's proposed plan to Wi-Fi enabled the whole of Penang State in Malaysia in order for the state to stay competitive. This practice has also been done in Singapore whereby Wi-Fi services are free in Singapore (Lemon, 2006/2008). Due to most of the participant in the studies is from the young age group of 21 to 30 which is 113 respondents or equal to 53.3% (table 3.3). probably they could not understand the Malaysian government role in implementing the online banking. Apart from that, young user might think that implementation of online banking is executed by the financial institutions themselves but they fail to understand that its an effort Malaysia government via Bank Negara Malaysia.

H5: Triability/ Observability not positively influence attitude towards online banking.

Noted that some previous information system research excluded the use of the Trialability and observability variable in their models (Tan & Teo, 2000); (Suganthi, 2001); (Gerrard, 2003), (Brown, 2004). However in the current study the Trialability

and observability attributes has been measure as one construct but it's still showing as insignificant result with attitude. The possible justification for this unanticipated relation is that the less observable the online banking use is, the more it will be adopted by individuals and vice versa. This is because Security is an important aspect of performing online banking for the users and its supports with (Black, 2001). Since there is not enough past research in Triability area considering this relationship from less developing countries, this construct of trialability could be more important to non-Western and developing countries than it is to developed ones where individuals might be more exposed to similar technologies of the banking services and familiar usage of information technology. In this respect, finding in this studies are contradicts with (Brown, 2004).

H3: Perceived Enjoyment positively influence attitude towards online banking.

However, finding with Perceived enjoyment is not significant and contradict with some of the prior researches (Tero Pikkarainen, 2004); (Igbaria M. S., 1994); (Davis F. B., 1992) as mostly of the user's are giving importance to the other essential aspects rather than focusing on the aspect of fun with online banking. Factors such as convenience, trust, security, reliability sounds more important than how do the user's enjoying the innovation of technologies.

H7: Internet connections not positively influence attitude towards online banking.

H8: Information on online banking not positively influence attitude towards online banking.

The finding on Internet connections also contradicts with finding in the prior study by (Sathye M. , 1999). The possible argument will be, nowdays technology is considered to be the key driver for the changes around us (Papers For You, 2006) in this era everyone can simply get internet asccess everyware (e.g wireless internet broadband, cybercafe) so finding proper internet conections is not an issue anymore to influence the adoption of online banking.The same reason is applicable for the insignificant result for amount of information as the users may get the need information in various sources.However the finding of this study is contradicting with (Sathye, 1999). However insignificnts of the result of information actually in align with the finding by (Mary Loonam, 2008) which indicating that r*espondents were less interested in general information when using e-banking and sought information specifics relating to own account details, this has been reflected by the following quote:*

"The general information I am not interested in this time (in relation to online banking). I know exactly where I am going so I just want to get into it (banking web site) and get the job done [. . .] I know my bank, I know the services they offer me" (Lisa, 26-35, Expert User).

Its showing the general attitude of respondents that they did not appreciate banking information being pushed on them. Respondents revealed a detached attitude with regards to banking information and generally felt if they

needed it they would acquire it. In another words, respondents were indifferent to financial information unless it directly related to their specific financial requirements.

H12: Consumer's demographic factors have partially significant impact on customer's attitude towards using online banking

H12a: Age has a significant impact on customer's attitude towards using online banking. Young customers are more likely to adopt Internet banking.

H12b: Income has a significant impact on customer's attitude towards using online banking.

H12c: Gender has not significant impact on customer's attitude towards using online banking. Males are more likely to adopt online banking.

H12d: Education has a positive impact on customer's attitude towards using online banking

We have now described the demographics of the survey participants, which showed that demographics have an impact on the use of online banking. First, we saw that a online banking user are mainly from young age of group aged between 21-30 (15.33%) followed by 31-40 (15.34%), which supported the previous studies by (Czaja S. S.,

1998); (Wang, 2003); (Alagheband, 2006) saying that Young age has a significant influence towards attitude in adopting online banking. We also found that ethic group does have influence in the adoption of online banking. The study reveals that the adoption level among the Indian respondents are high 12.55% compare to Malay respondents indicates 11.51%. As pointed out earlier we saw that the field of employment also had an impact on the use of online banking. Our results imply that a large proportion of online banking users are from Managerial position which indicates 16.41% compare with clerical staff its only 11.84%. Further, we saw that education is one of the key driving forces toward the adoption of online banking: 73.1 percent of the users had university degree against only 13.3 percent are from diploma background. This result is supported by the study by (Burke, 2002). Next focus is on the respondents' monthly income; the high the level of education the high will be the respondents' income which the percentage of online adoption will be high as well; but Based on our finding income level of respondents did not influence the attitude of the adoption of online banking. The findings are against of the study by (Venkatesh V. a , 2000). In the other words if the income is high it's doesn't mean that the respondent is using online banking. The possible justification for the finding is the respondents could earning high income not due to high education but due to experience (file and rank). To sum up, demographic factors seem to partially have impact on the use of online banking.

H13: Attitude towards online banking positively influences Online banking usage (Behavior).

This studies also analysis the influence of the mediating variable (attitude) towards dependent variable (online usage behavior). The findings of this study identified that attitude plays an important and significant role in determining the usage behavior of online banking. This is aligning with the finding by (AJZEN, 1991); (Yogesh Malhotra, 1999) which indicating about the attitude has a positive influence on the behavior. These studies found out that Independent variable such as security and privacy, perceived usefulness, perceived ease of use and reliability positively influencing the behavior via attitude but the other independent variable such as internet connection, amount of information, government support, perceived enjoyment, and triability / observability not positively influencing the behavior via attitude.

CHAPTER 5: CONCLUSION AND RECOMMENDATIONS.

5.1 SUMMARY AND CONCLUSION

The aim of this study is to develop modified version of TAM and DOI that can explain the bank customers' attitude and behavior in using online banking. The investigated