CHAPTER IV

FINDINGS AND EVALUATION

4.1: Introduction

In this chapter an analysis of trust factor for KT from bank sources to stakeholders (citizens, business partners and employees), via an e-bank web site operated by Malaysian internet banking users, is reported. The analysis draws upon a survey with key Malaysian bank user's respondents. These results obtained from e-banking users in Malaysia based on electronic banking practices are reported and discussed in this chapter. E-banking services include online transactions and transferring of banking knowledge to clients via bank web site. This strategy of e-banking enables the client to access various services from paying bills to online investments via bank web sites in Malaysia. Except cash withdrawals, an e-banking web site client can access to most of banking services (Kuo-Wei et al., 2011).

Utilization of the internet is the cheapest channel to transfer bank's knowledge and also minimizes the probability of errors by bank tellers and achieve competitive advantages (Jaoungkun et al., 2011). Among other many benefits offered by e-banking include customized web site to the users, innovative and effective bank services to gain access and interaction with web site at a reduced cost (Sulieman et al., 2011), financial development required to improve e-banking with faster response to e-banking user and fulfill their services effectively (Jaoungkun et al., 2011). Even though e-banking provides many advantages, e-banking services are influenced by lack of trust in Malaysia which needs to be overcome so as to focus on satisfaction as a way of encouraging Malaysians to use e-banking.

Descriptive analysis of the study in the first section of this chapter reported the demographic information such as gender, age, marital status, level of education,

current employment status, monthly income, internet experience, e-banking experience, average monthly transactions, place of transaction and which device used. The second section provided the initiation of KT process; while the third section the implementation of KT process; fourth section ramp up in KT process; the fifth section integration in KT process and the sixth section trust factor which proved crucial to effective KT via e-banking web site in Malaysia based on the proposed framework.

4.2: Descriptive analysis

This section comprises the respondent's demographics such as gender, age, marital status, level of education, current employment status, monthly income, internet experience, e-banking experience, average monthly online transactions, place of transaction and which device used. This information was important because of they provided a detailed description of the e-banking users in Malaysia and their composition. The descriptive statistics of this research demographics is reported in the subsequent section.

4.2.1: Sample Composition by Gender

Gender formation from where the samples reported in this research is plotted as shown in Figure: 5 and the composition in Table: 3 Males comprise 30% (111 respondents) of the entire sample while females (261 respondents) comprise 70% of the sample, because of the number of female student more than male student in USIM so the majority is for female . The report and findings were based on the respondent's experience in e-banking services among bank sectors in Malaysia. The samples gender composition representation is important because it explores different gender experiences on e-banking transactions and the influences associated with trust and competencies in basic skills in e-banking among Malaysians. This knowledge is required to improve e-banking services in Malaysia among users.

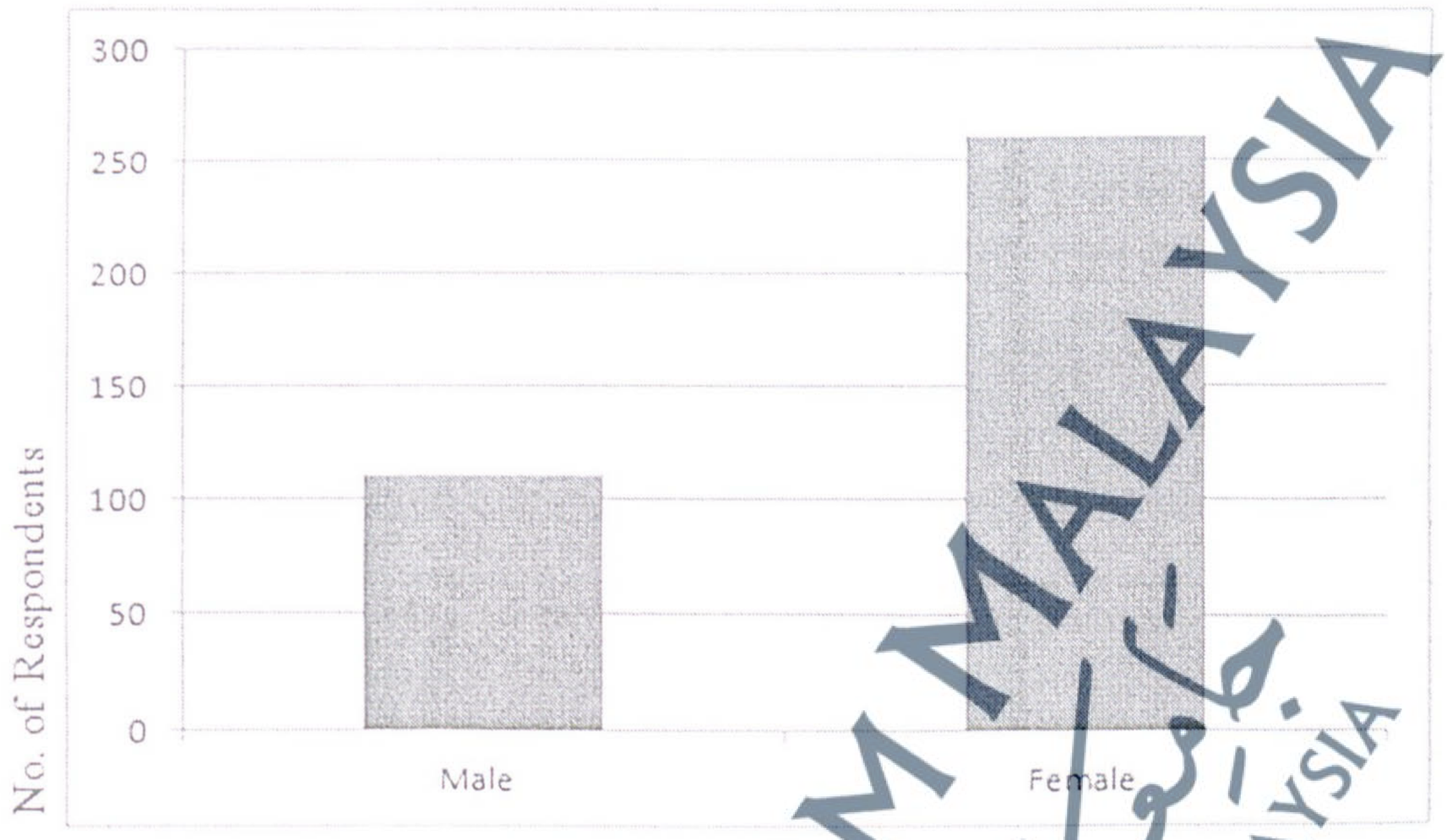

Figure: 5 Frequencies of the Respondents by Gender.

Table: 3 Respondents Percentage Composition by Gender.

	Frequency	Percent (%)
Male	111	30
Female	261	70
Total	372	100

4.2.2: Users ages

E-banking users among Malaysian banks age range is reported in Figure: 7 while the percentage formation of the sample is as shown in Table: 4 Users between the ages of 21-30 years were the highest (74%), followed by less than or equal 20 years (20%), 31-40 years (5%) and above 40 years (1%) respectively. This result demonstrates that those in the 21-30 years age group engage in online transactions are more than other age ranges illistrated in Figure: 6 among Malaysians e-banking users. This age includes adults and involved in family responsibilities; however, this can be the reason why most Malaysians within the age from 21 to 30 years use e-banking web site which has been

found as an efficient and convenient medium (Ahmad, 2011) for most of their transactions. This proportion however, represents major e-banking users in Malaysia. The second highest e-banking users less or equal 20 years comprises of youths, sensing that most users within this age range have less family responsibilities. Users between 31- 40 years were the third ranked e-banking users in Malaysia. The study found that trust influences Malaysians using e-banking services returns to the problem associated with lack of trust over user's personal information and are exposed to fraud (Sohrabil et al., 2013). To encourage wider usage of e-banking among Malaysians, there is a need to establish reliable transaction web sites that can improve trust among users such as the use of password in e-banking web sites, site specific question regarding user's account or use of pin code.

Figure: 6 Age Range of e-Banking User's in Malaysia

Table: 4 E-banking User`s Ages

	Frequency	Percent (%)
Less or equal 20	74	20
21-30	274	74
31-40	20	5
Above 40	4	1
Total	372	100

4.2.3: Marital status e-banking user's

This composition show the marital status for resopondents, since the single respondent they have less responsibility and paying bills like married so the married they need to use e-banking to settle their liabilities. Figure: 7 drawn the composition of marital status for e-banking user in Mamalsia and Table: 5 shows the e-banking users marital status.

Figure: 7 Marital Status of e-Banking Users in Malaysia

Table: 5 E-banking Users Marital Status

	Frequency	Percent (%)
Single	338	91
Married	34	9
Divorced	0	0
Widowed	0	0
Total	372	100

4.2.4: Educational levels of e-banking users in Malaysia

The level of education for e-banking users in Malaysia is represented in Figure: 8 and the percentage composition in Table: 6. Undergraduates ranked the highest while postgraduate were the least ranked, undergraduates 89% (331 respondents), and postgraduate 11% (41 respondents). Educational level for e-banking user can be used to identify the compatibility of services that are provided by the e-banking web site to users such as trust in online transactions and computer skills. Blanca (2011) reported that trust facilitates the acceptance of a particular technology while Jeoungkun et al (2011) said that successful e-banking transactions can be facilitated by user's educational level. The educational level of e-banking users has been reported as a barrier to acquisition of basic computer skills, and if there is a lack in computer skills it is normally to effect on e-banking user to conduct financial transaction via e-banking web site (Al-Smadi & Wabel, 2011). Therefore, knowledge on the reported educational level of e-banking users indicates that basic knowledge of computer skills could be enhanced by educating the users and so can increase trust in transferring knowledge via e-banking web site.

Figure: 8 Level of Education Level for Respondents

Table: 6 E-banking users' level of education

	Frequency	Percent (%)
Undergraduate	331	89
Postgraduate	41	11
Total	372	100

4.2.5: Employment Status for e-Banking User's

Employment status among e-banking users in Malaysia can be drawn in Figure: 9 while Table: 7 shows their percentage composition. Full-time students were the most e-banking users in Malaysia followed by employed users and self employed at second and third respectively. The order of the composition of employment status among e-banking users in Malaysia is full time students (90%), employed (9%) and self employment (1%). This information is important in that it provides sources of income for users which can be used to determine the potential transactions that are conducted through e-banking web site in Malaysia. The result of this survey represents the current population of employment in Malaysia.

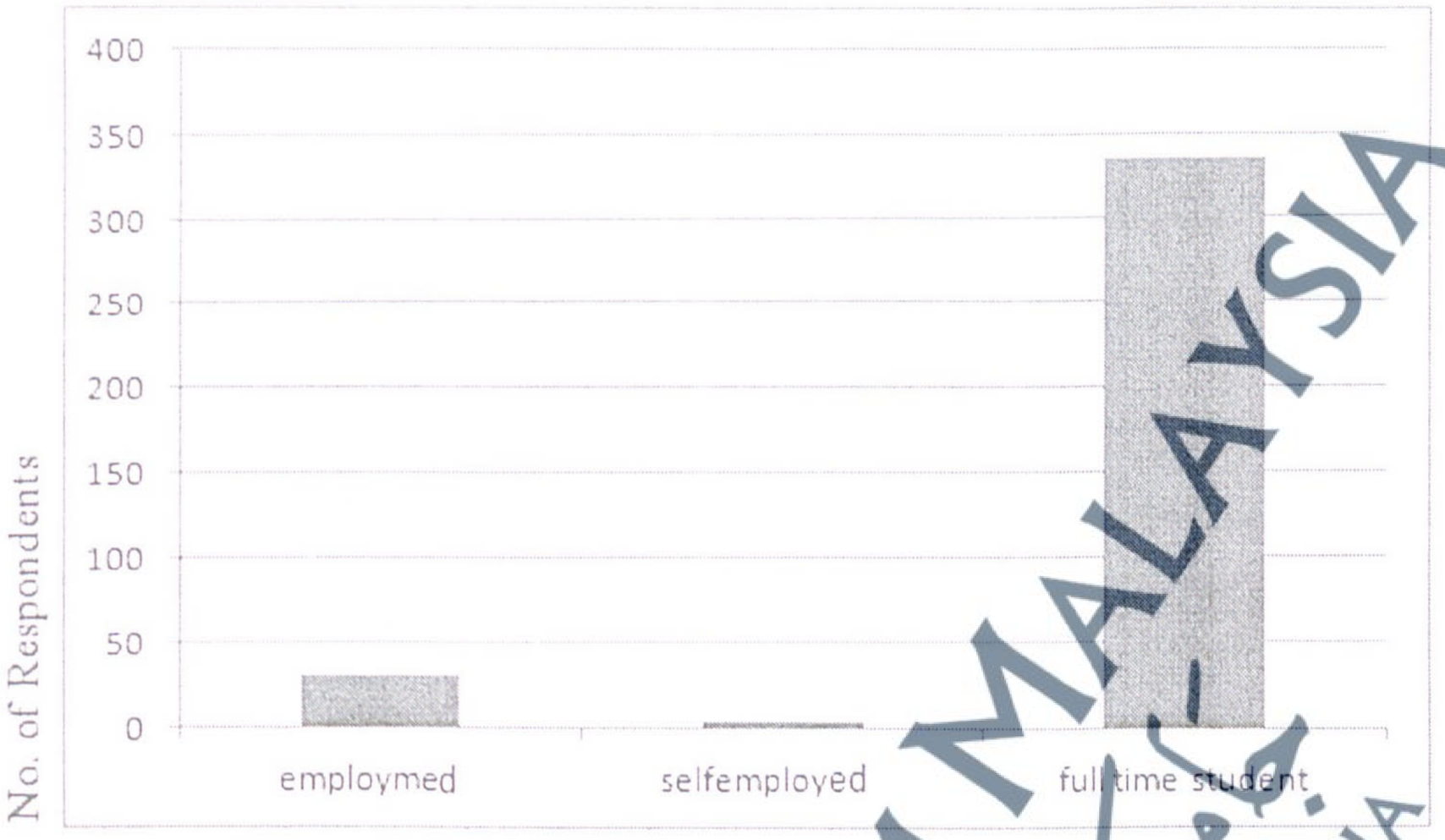

Figure: 9 Employment Status among e-Banking Users in Malaysia

Table: 7 E-Banking Users Employment Status

	Frequency	Percent (%)
Employment	31	9
Self-employment	4	1
Full time student	337	90
Total	372	100

4.2.6: Composition of Monthly Income for e-Banking Users

The monthly income of respondents is represented in Figure: 10 Percentage proportions of respondents by monthly income were in the order of RM3000 or less (90%), RM3001 to RM6000 (5%), above RM6000 (5%). However, the data collected from different monthly incomes in Malaysia described representative information which are used to draw a conclusion on the respective practices on e-banking web site among Malaysians.

Table: 8 shows a descriptive representation of the respondent`s composition of monthly income, number and percentage.

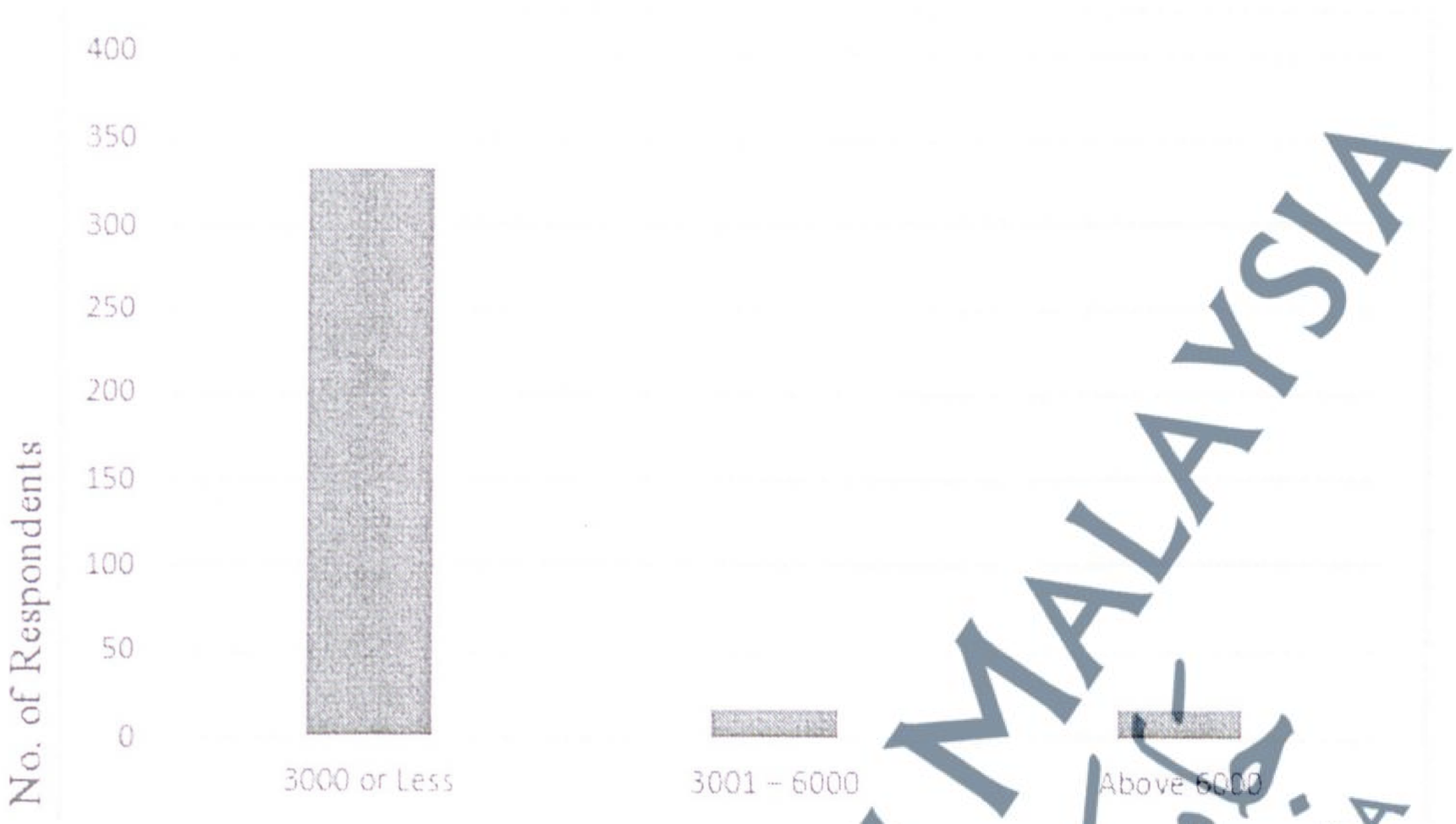

Figure: 10 Participants Composition by Monthly Income (RM)

Table: 8 Description of Users Monthly Income by Percentage

	Frequency	Percent (%)
3000 or Less	335	90
3001 – 6000	18	5
Above 6000	18	5
Total	372	100

4.2.7: Users Experience in e-Banking

This section presents experience of e-banking users such as access to internet, number of years using the internet and number of years using e-banking, average number of e-banking transactions monthly, where you conduct e-banking transactions, and which hardware you use to conduct e-banking transactions.

4.2.8: Yearly Internet Access Among e-Banking User's in Malaysia

The number of years using internet by users is demonstrated in Figure: 11, and percentage of the sample represents in the Table: 9. The information respresented by this result shows the proportion of Malaysians who can execute online transactions at their convenience including when they are at their residential homes. A greater proportion of Malaysians have access to internet; therefore, e-banking transactions can be widely used in Malaysia. It is believed that the increasing influence and the using of e-banking in Malaysia will motivate e-banking non-users to use the internet technology.

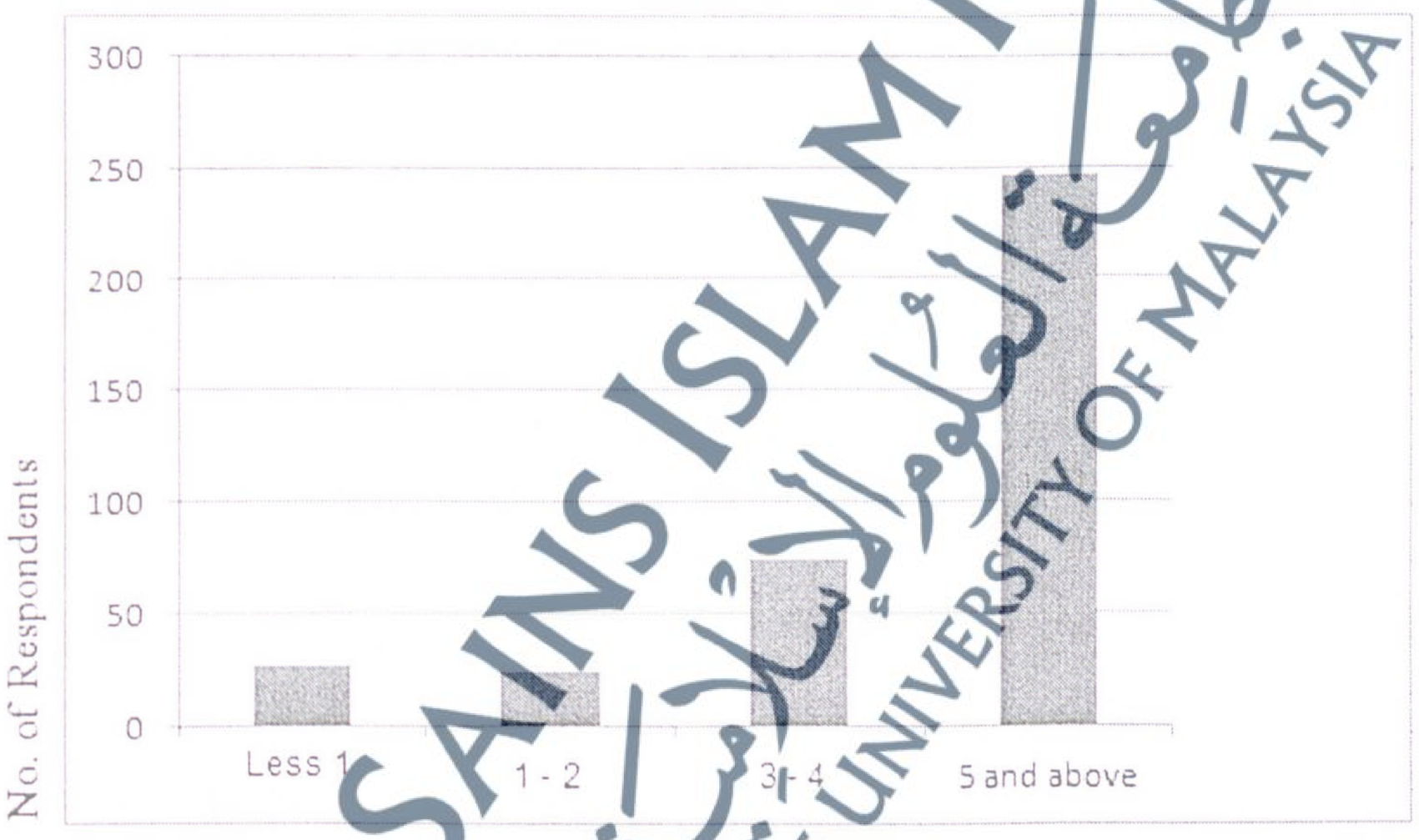

Figure: 11 Yearly Access Internet by e-Banking Users (years)

Table: 9 Numbers of Years Using the Internet by e-Banking Users.

	Frequency	Percent (%)
1 or less	27	7
2 – 3	24	6
4 – 5	74	20
5 above	247	67
Total	372	100

4.2.9: Yearly e-Banking Among e-Banking Users

The results show the banking web sites used among Malaysians and illustrated in Figure: 13, while Table: 10 represents the respondents' proportion by percentage. Most e-banking users have used e-banking services for two years (53%), while 34% are engaged in online transactions via bank web site for less than one year, 8% for three to four years and 5% have used e-banking for five years or more.

However, the use of web site for online transaction medium shows the need for improved e-banking web sites and computer infrastructure which have been reported to be a major barrier to user's satisfaction and main reason to increase trust among e-banking users (Alsulimani, 2013). Interest on the use of bank web site for conducting online transaction is important in the present study, in that most online transactions depend execlusively on the use of computer and electronic devices. Therefore, the computer and technology skills are considered as an important online transaction criterion in meeting user's satisfaction among Malaysians. Wise and Ali (2009) argued that many banks invested in bank web sites to deduct branch costs and refer to clients' preference to the use of web site than branch transactions. The use of web site lowers the cost of banking services which could be the reason why most Malaysians prefer e-banking services (Yen & Adviser-Kin, 2011). This can be seen from a recent survey obtained among e-banking users and are as shown in Figure: 12.

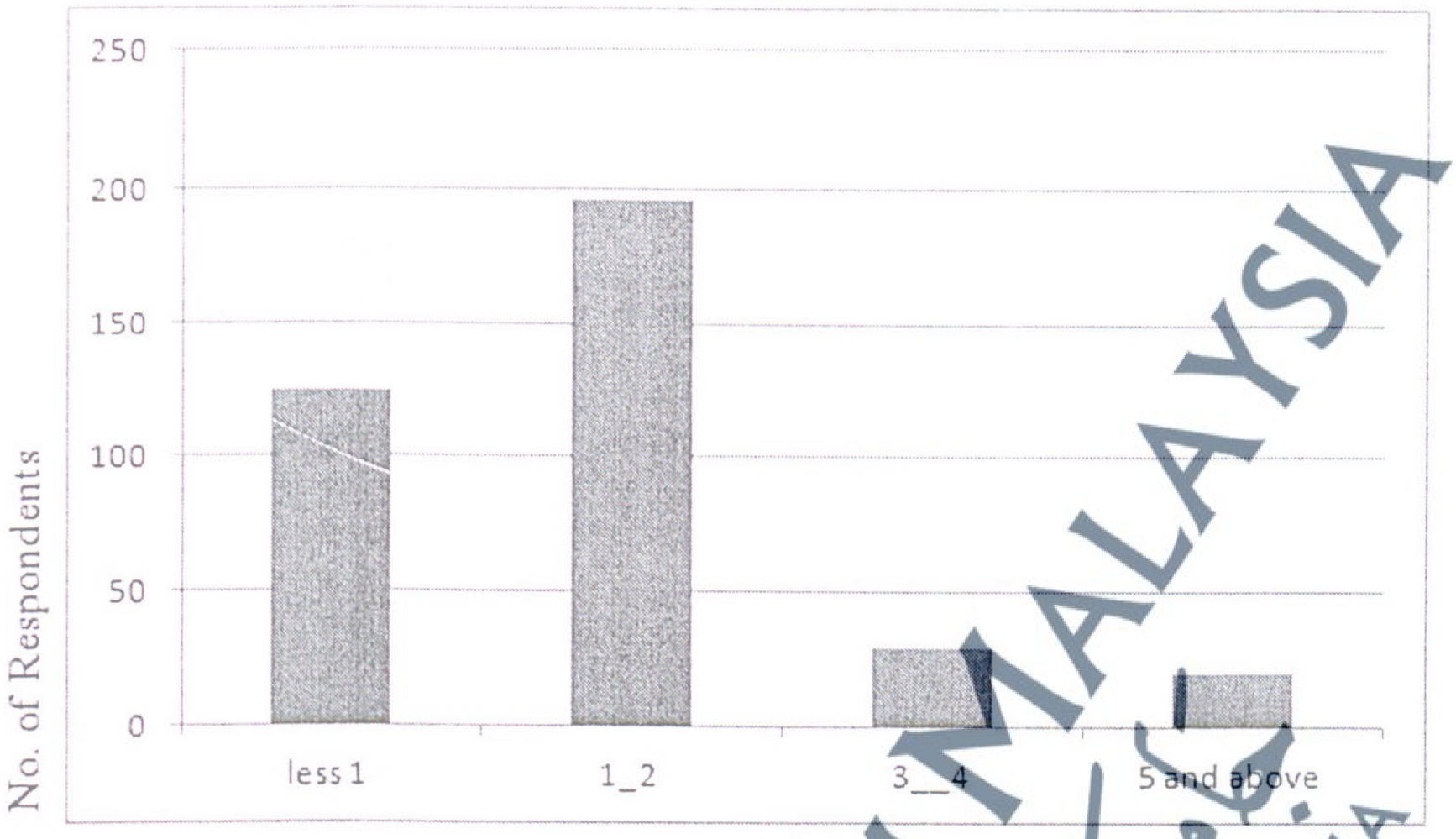

Figure: 12 Representation of Yearly e-Banking among Users (years)

Table: 10 Use e-Banking by Users (years)

	Frequency	Percent (%)
1 or less	125	33
1 – 2	197	53
3 – 4	30	8
5 and Above	20	6
total	372	100

4.2.10: Frequency of Use the E-banking web site in Malaysia

To confirm the frequency of using e-banking services among users, Figure: 13 and Table: 11 shows the monthly frequency of using e-banking web sites. Most e-banking users 76% are engaged in online services between 3 and less in a month, 16% (4-7 times) in a month, 5% 11 and more times in a month and 3% more than (8-11 times) in a month. The frequency of using e-banking facilities can be identified from the nature of business that is conducted via e-banking web site. However, this is not within the scope of the present study.

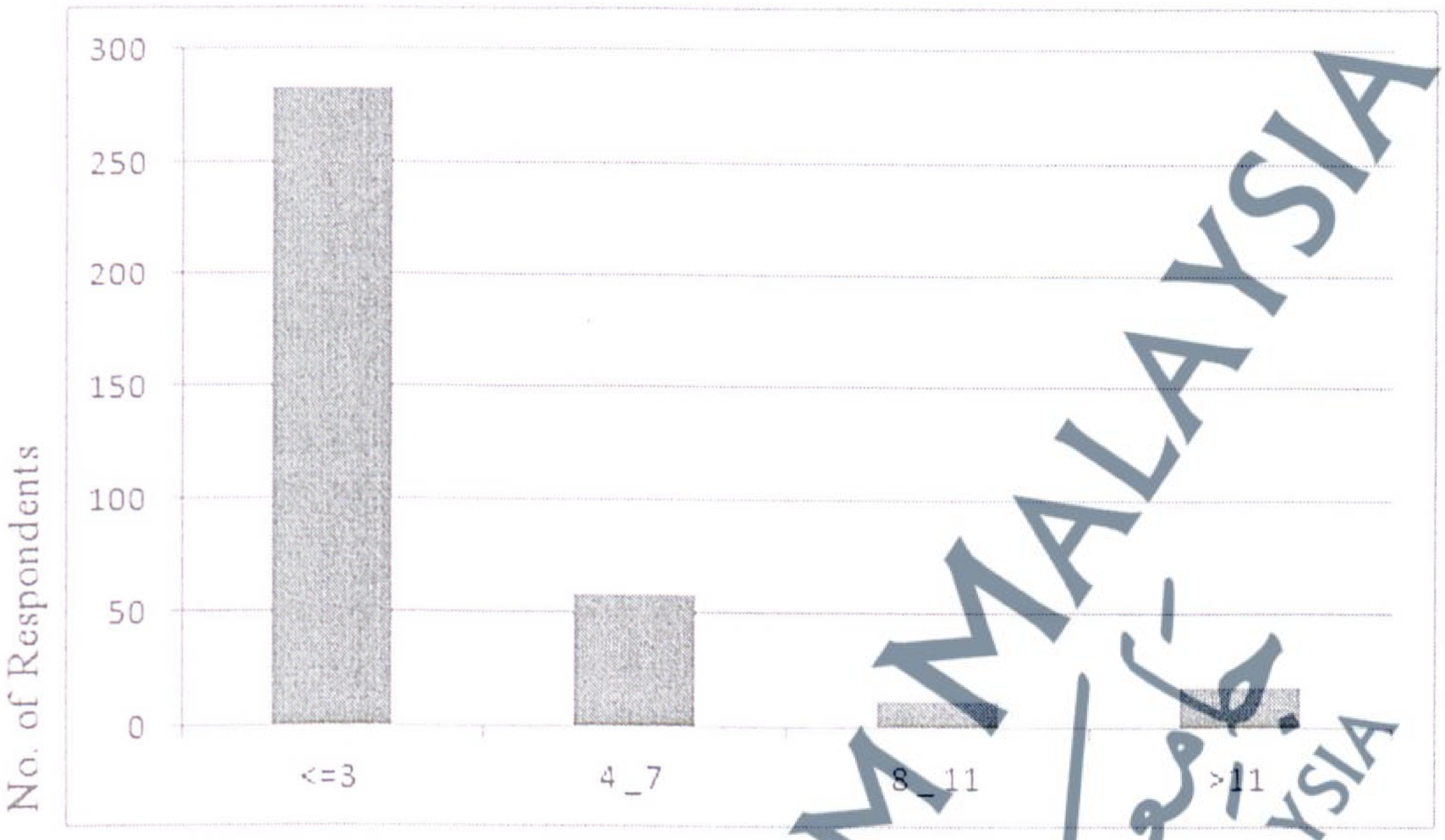

Figure: 13 Monthly Frequency of Using e-Banking Web Site in Malaysia

Table: 11 Monthly Frequency of Using e-Banking Services in Malaysia

	Frequency	Percent (%)
<=3	284	76
4-7	58	16
8-11	12	3
>11	18	5
Total	372	100

4.2.11: Composition of Place of Conducting Transaction by e-Banking Users

Figure: 15 is a representation of the respondent's place when they are conducting transactions. Percentages of respondents were carrying out transactions in the order of home (75%) because they think that may some followers can track them in work network or public WIFI and get their user name and personal information, public WIFI (18%), work (6%), cyber cafe (1%). Table: 12 shows a descriptive representation of the respondent's composition by place of transaction, number and percentage.

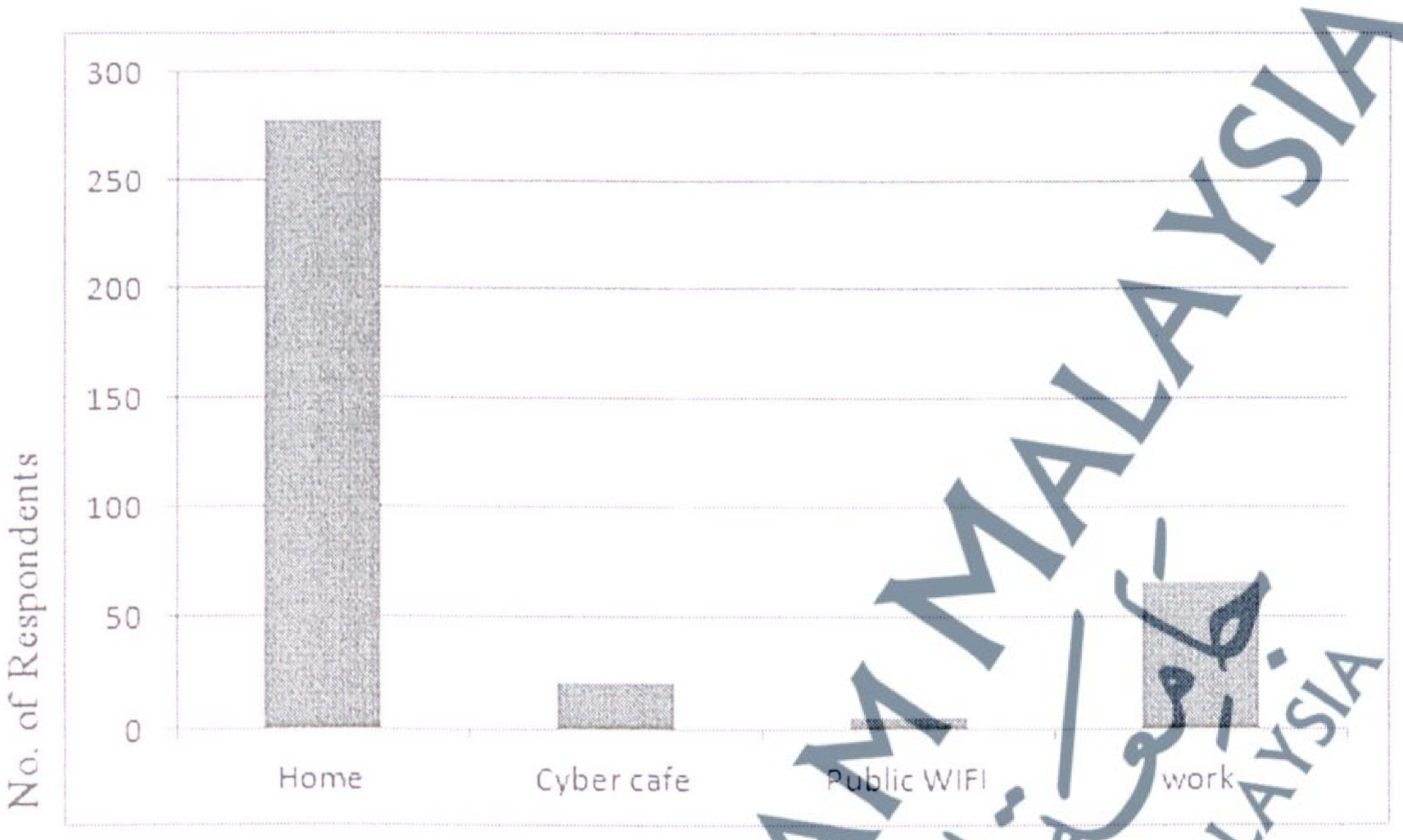

Figure: 14 Participants Composition by Transaction Place in Malaysia

Table: 12 Description place of conducting online transaction by percentage

	Frequency	Percent (%)
Home	279	75
Cyber café	21	6
Public WIFI	6	1
Work	66	18
Total	372	100

4.2.12: Composition of Hardware Used for Conducting Transactions by e-Banking Users

Figure: 15 is a representation of the respondent hardware used when conducting transactions. Percentages of the hardware used by respondents to conduct transactions in the order of laptop (83%) because hand phone and tablet easy to attack since security level is not like laptop and desktop computers , desktop to (9%), hand phone (6%) and

tablet (2%) Table: 13 shows a descriptive representation of the respondent's composition by hardware of transaction, number and percentage.

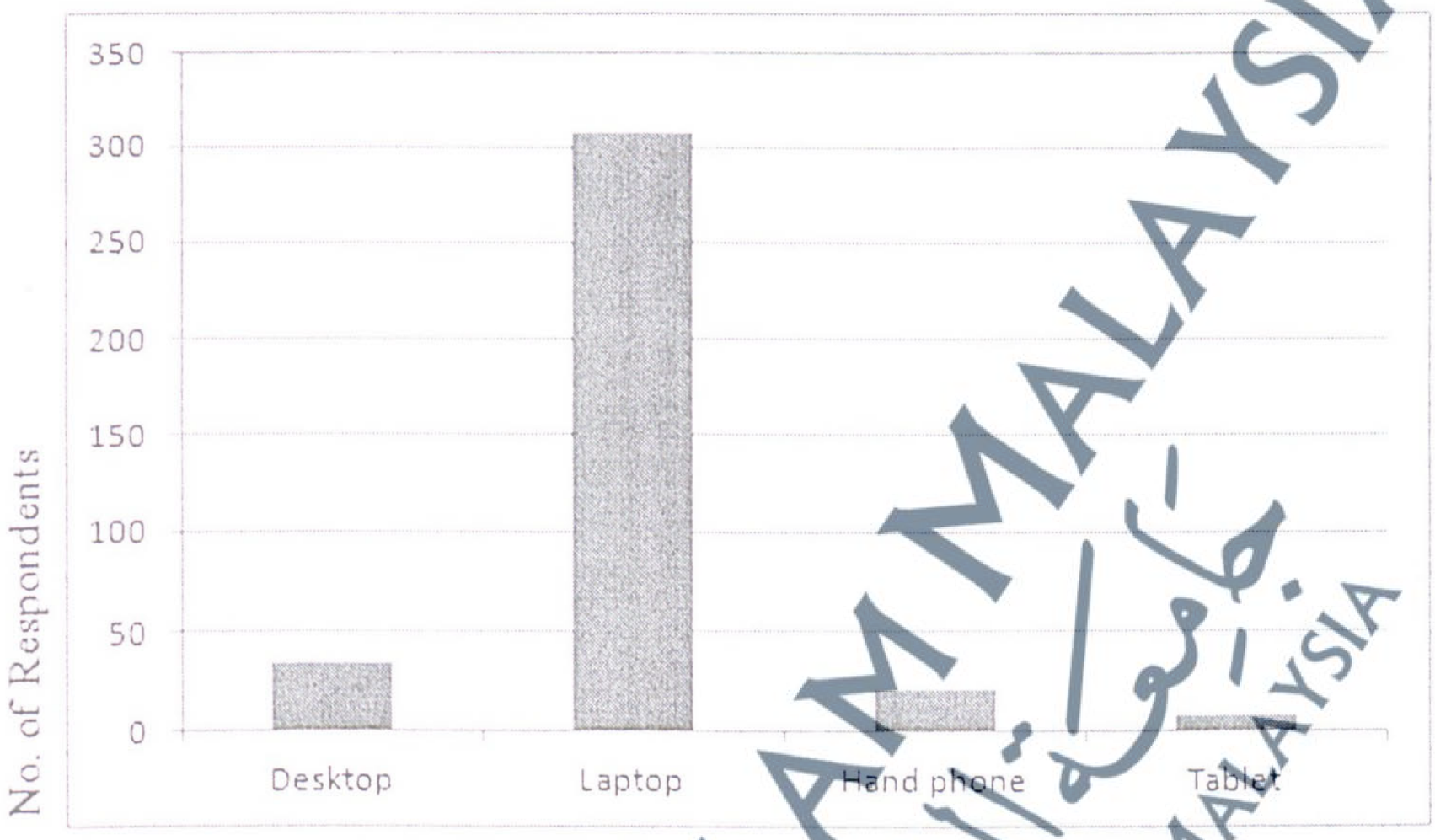

Figure: 15 Hardware Used for Conducting e-Banking Transaction in Malaysia

Table: 13 Descriptive Representation of the e-Banking Users by Hardware of e-Banking Transaction

	Frequency	Percent (%)
Desktop	34	9
Laptop	308	83
Hand phone	22	6
Tablet	8	2
Total	372	100

4.3: Correlation of Trust Factors in KT via e-Bank Web Site in Malaysia

The trust factor in KT was reported and is discussed below. To evaluate user's trust in KT, Pearson correlation was employed for trust factor and KT process via e-banking web sites in Malaysia. Reliability statistics were used to measure the consistency of the value of items starting from 0.70 as the minimum (Sekaran, 2000). Pearson correlation

was conducted to test the level of significance for trust of KT process at a significant level of 0.05. These statistical tools were considered suitable because they provided clear understanding on the influences that constrained KT based on its reliability score over tested items. Correlations were used to validate KT process by analyzing the key components and drawing distinct and predictable results based on the variables through a justifiable significance score

Trust is the important variable for e-banking KT especially in uncertain environments where transaction is conducted online without face to face contact (Hamadi, 2010). In the present study, trust refers to the willingness of Malaysian e-banking users to engage in online transactions through internet web site. This definition is consistent with Thatcher (2008) on the internal and external dimensions of computer; nevertheless, the definition views trust in KT based on willingness of e-banking users to perform a reliable transaction via facilitated internet web site.

4.4: Reliability Test

A Cronbach alpha test was conducted on all five factors to test the reliability of all the variables separately. This was to determine the internal consistency of the scale used. The values of Cronbach Alpha coefficient are depicted below in Table: 14. All of the factors were found to have alpha coefficient values of greater than 0.7, which is an acceptable level of reliability (Hair et al., 2006).

Table 14: Reliability Test

Construct	alpha	Description
Trust	.91	User's willingness to transfer and use knowledge.
Initiation	.90	Difficulties experienced prior to the decision to transfer knowledge.
Implementation	.79	Decision to transfer knowledge and start of actual use.
Ramp up	.81	Unexpected problems from the start of actual use until satisfactory performance obtains.
Integration	.83	Difficulties experienced after satisfactory performance is achieved.

4.5: Correlation Analysis

In the stage of hypothesis testing, correlation analysis were mainly employed in order to examine the relationship between independent variables and KT process separately. The trust was used as predictor variables in correlation analysis with the dependent factor. The correlation and significant value between independent variable and each dependent variable (KT stages) was summarized in Figure: 16 and Table: 14 respectively. Lastly, correlation was used to examine the integrated relationship of independent variables with KT stages initiation, implementation, ramp up and integration via e-banking web site.

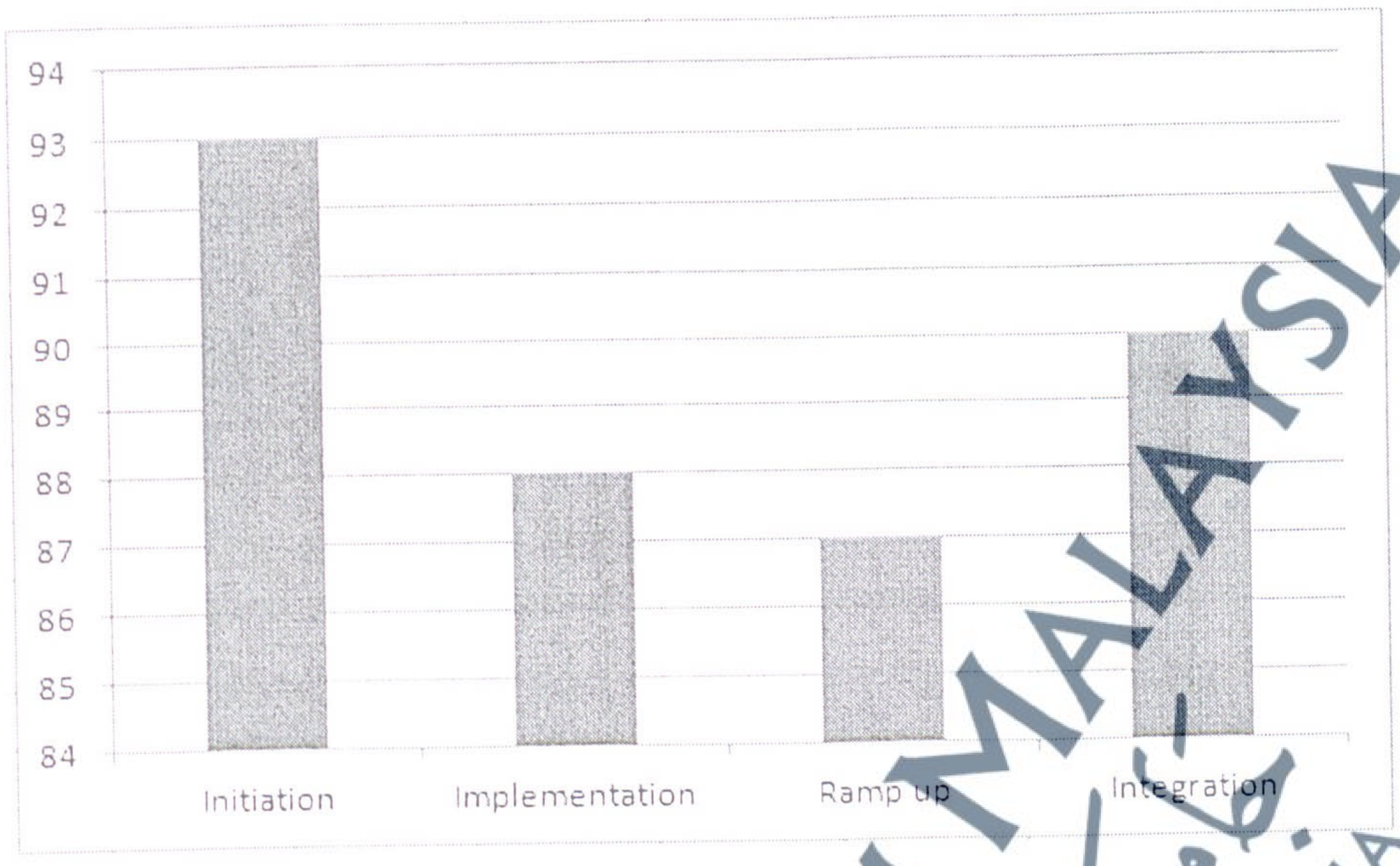

Figure: 16 Correlation of Users Trust in KT Process via e-Banking in Malaysia.

Table: 15 Correlation Analysis for Trust in KT via e-Banking in Malaysia

		Trust	Init	Imp	Ramp	Integ.
Trust	**Correlation**	**1**	**.933****	**.884****	**.878****	**.905****
	Sig. (2-tailed)		.001	.001	.001	.001
	N	372	372	372	372	372
Init	Correlation	.933**	1	.879**	.889**	.908**
	Sig. (2-tailed)	.001		.000	.000	.000
	N	372	372	372	372	372
Imp	Correlation	.884**	.879**	1	.777**	.867**
	Sig. (2-tailed)	.001	.000		.000	.000
	N	372	372	372	372	372
Ramp	Correlation	.878**	.889**	.777**	1	.861**
	Sig. (2-tailed)	.001	.000	.000		.000
	N	372	372	372	372	372
Integ	Correlation	.905**	.908**	.867**	.861**	1
	Sig. (2-tailed)	.001	.000	.000	.000	
	N	372	372	372	372	372

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

To further establish the nature of the correlation analysis and relationship between trust and KT process this research repeated the correlation analysis for each stage of the transfer process, initiation, implementation, ramp-up and integration.

Hypothesis 1: there exists a positive relationship between trust and initiative stage in KT process.

In the present study, the result obtained from correlation of trust and initiation stage which involves user recognizing a need for knowledge and commencing a search for that knowledge and knowledge provider preparing knowledge content for the web site, understand needs of the recipient also requires content to be prepared with the recipient in mind. KT process showed a significant value of 0.01, and correlation of 0.933. Lack of trust in transferring knowledge via e-banking web site is a behavioral attribute that is crucial in KT process and can discourage users from engaging in transfer knowledge via e-banking web site (Delone & Mclean, 2003; Goh & Sandhu, 2013) and need to arise convince e-banking users on the reliability of e-banking web site so as to encourage them to trust of usage and services. Holste and Fields (2010) found that trust is positively related to a user's willingness to transfer and use knowledge.

Hypothesis 2: there is exists a positive relationship between trust and implementation stage in KT process.

Implementation, begins when knowledge flows between the e-bank web site and the users, influences associated with lack of trust and lack of basic e-banking computer skills which must be available to users. It should function properly and respond quickly to support users to access and use the knowledge, in this stage the user decided to transfer knowledge and start of actual use. Of concern is how difficult it is to bridge the communication gap between the provider source and the recipient. Of interest here is that at e-banking web site, the users saw these difficulties as a consequence of ICT technology issues and additional communication gap issues, such as language and cultural conventions. The result of correlation analysis between trust and implementation stage showed significant value 0.001, and correlation of .884. Lack of

trust influences KT process which has limited the usage of e-banking web site among Malaysians.

Hypothesis 3: There exists a positive relationship between trust and ramp up stage in KT process.

Ramp up, in this stage unexpected problems from the start of actual use until satisfactory performance obtains. The results were significant value 0.001 and correlation 0.878. Ramp up begins when the knowledge recipient starts applying the received knowledge, the e-bank users see as critical that the bank should be keen to learn and adopt new work practices of processing and performing tasks (Azizan et al., 2011). In this sense they emphasize a responsibility for the e-banking user to be proactive in adopting new practices. The respondents see trust as critical that the web site should provide relevant knowledge to users in such a way that the content is easy to understand, and is written in simple and meaningful language chosen with the recipient in mind. While this may be seen as emphasizing the primacy of trust, it is specific that it encompasses matters of trust and functionality related to ensuring that the user has a positive first, and ongoing experience of the web site.

Hypothesis 4: There is a positive relationship between trust and integration stage in KT process.

Integration, difficulties experienced after satisfactory performance is achieved. The result obtained from correlation between trust and integration stage in KT process showed a significant value of 0.01 and correlation of .90. Lack of user trust influences the integration stage in KT process, knowledge recipient will have received the transferred knowledge, and integrated its use with their needs. Given success, they will refer to the web site again in future to meet further knowledge needs. When the knowledge recipient has received the transferred knowledge and moves to integrate its use with their needs, the e-banking users see that it is critical that the web site should contain content that is accurate, relevant, regularly updated and which meets user requirements. It should also contain advice on update schedules so that users can organize their revisit times (Azizan, 2011).

In the present study, trust among e-banking users in KT via e-banking web sites in Malaysia have a high correlation (0.933) in initiation stage which refers to the subjective assessment of the possible side effects in engaging in e-banking web site. E-banking as an online service includes the exchange of client's information which could be influenced by the risk of exposing sensitive information and privacy to unknown users. When customers have high expectation of the utility and outcome of using an e-banking web site for KT, they will have high intention to transfer their knowledge (Wang et al., 2009). That means increasing the trust of an e-banking web site which will facilitate its customers' intentions to transfer their knowledge. Therefore, research findings shed light on how to strengthen and improve an e-banking web site and communication channel so as to acquire and use customer knowledge effectively and efficiently.

4.6: Validation of the Proposed KT Model

The proposed trust in KT process met the intended need in that all the tested variables showed positive relationship. Personal profiles of e-banking users comprises 70% female and 30% male e-banking users with different levels of education, age range, and employment status in different states in Malaysia. This shows that the research instrument is valid for use across e-banking users and that the findings can be applied to e-banking sectors. However, the background information of e-banking users shows that the users have access to internet, and uses different electronic devices for different transaction purposes, have used e-banking web sites and are engaged in monthly transactions through e-banking web site. This result provided substantial information that supported the four hypothesis for trust in KT process via e-banking web site in Malaysia.

Furthermore, trust factor in KT process via e-banking web site used a test to validate the proposed Model using correlation analysis and reliability statistics coefficient based on Cronbach alpha value. Trust was significant and consistently reliable. This result is therefore suitable for evaluating user's trust in KT process in e-banking sector in Malaysia, so that variables that were tested were responsive to user's satifaction from data collected from e-banking users. The validated new KT Model is shown in Figure:3.

However, summary of the research findings based on the newly developed Model of trust in KT process via e-banking user's web site in Malaysia is as shown in Figure: 3 Summary of the research findings are shown in Table: 16.

Table: 16 Summary of findings based on the proposed KT Model

	Appropriateness	Result
Trust with initiation	Important	Positive
Trust with implementation	Important	Positive
Trust with Ramp up	Important	Positive
Trust with integration	Important	Positive

4.7: Summary

This chapter discusses the result of data that taken from e-banking users in Malaysia. The analyzed result has shown that lack of trust is detrimental to transfer knowledge via e-banking web site in Malaysia. The result has also shown that e-banking services are a dominant route for most banking transactions in Malaysia. Therefore, it is obvious that there is a necessity to enhance e-banking web site so as to encourage users to utilizing the e-banking web site comfortably. In addition, correlation and reliability statistics result on the trust factor in KT via e-banking web site in Malaysia had positive responsiveness on the e-banking services and in conformity with previous literature studies.