CHAPTER 4

4.0 FINDINGS

The following chapter covers the results for the distributed questionnaires, which the feedback was obtained from the respondents. It is mainly focused on the data findings and analysis of collected data. The chosen tests are to test on the data such as multiple regression, descriptive analysis, frequency analysis and correlation would be well-presented and well-discussed in this chapter.

4.1 Frequency and Descriptive Analysis

This part will be used to illustrate and describe the demographic profile of the 193 respondents who participated in this survey. The demographic profile of the respondents will be described by gender, age, ethnic group, educational level, years of working experience, occupation, income level and the usage of DMT.

4.1.1 Demographic Profile

Refer to Table 4-1, the respondents by gender were almost equally distributed between males and females.

Table 4-1

Demographic Profile (n-193)

			Frequency	Percent
Gender	Male		104	53.9
	Female		89	46.1
		Total	193	100
Educational Level	Degree / Professional		115	59.6
	Masters		78	40.4
		Total	193	100
Age	19 to 28		50	25.9
	29 to 38		124	64.2
	39 to 48		17	8.8
	49 to 58		2	1
		Total	193	100
Occupation	Executive		62	32.1
	Manager		92	47.7
	Professional		19	9.8
	Own Business		11	5.7
	Others		9	4.7
		Total	193	100
Ethnic Group	Indian		44	22.8
	Malay		57	29.5
	Chinese		89	46.1
	Others		3	1.6
		Total	193	100
Income Level	Less than RM 2000		6	3.1
	RM 2001 to RM 4000		55	28.5
	RM 4001 to RM 6000		40	20.7
	RM 6001 to RM 8000		30	15.5
	RM 8001 to RM 10000		49	25.4
	More than RM 10000		13	6.7
		Total	193	100
Working Experience	Less than 2		11	5.7
	2 to 5		90	46.6
	5 to 8		75	38.9
	More than 8 years		17	8.8
		Total	193	100

There were only two groups of respondents have filled up the questionnaires. Since this research was intended to obtain results from only respondents who know about the DMT, the questionnaires were only distributed to respondent designated executive and above levels, i.e first-line management and above. These targeted respondents have minimum qualification of Bachelor Degree. Many of them are professionals and master degree holders. 25.9 percent of the respondents belong to age group from 19 to 28. At 64.9 percent, the majority of the respondents belong to age group from 29 to 38. These two age groups total to 90.2 percent of all 193 respondents. The balance, 8.8 percent belongs to age group from 39 to 48 and only 1 percent from age group from 49 to 58. About 32.1 percent of the respondents are executives, 47.7 percent managers, 9.8 percent professionals and 5.7 percent business owners. The balance of 4.7 percent represents MBA students who were working prior to become full-time students. Majority of respondents were Chinese at 46.1 percent, followed by Malays at 29.5 percent, Indian at 22.8 percent and very minimum of Others at 1.6 percent. About 90 percent i.e the majority of respondents were almost equally distributed from four inome groups, earning between RM 2001 to RM10000. This represents more on the occupation levels between executives, professional and managers. About 85.5 percent of the respondents have working experience between two to eight years. 5.7 percent of the respondents have less than two years of working experience. Remaining 8.8 percent of the respondents have more than 8 years of working experience.

4.1.2 Roles and Contribution of DMT in Malaysia

Table 4-2

Easiness of using DMT

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	9	4.7	4.7	4.7
	Agree	115	59.6	59.6	64.2
	Neutral	60	31.1	31.1	95.3
	Disagree	5	2.6	2.6	97.9
	Strongly Disagree	4	2.1	2.1	100.0
	Total	193	100.0	100.0	

Table 4-3

Descriptive Table of Easiness of using DMT

	N	Mean	Std. Deviation
Do you feel DMT is easy to use?	193	2.38	.712
Valid N (listwise)	193		

Table 4-2 reveals that 64.3 percent of the respondents agreed that DMT is easy to use and 31.1 percent of the respondents give neutral view taking a mid-stand. However, only a minority (4.7 percent) of the respondents disagree that DMT is easy to use. Refer to Table 4-3, on average, majority of the respondents found that DMT is easy to use referring to the mean value of 2.38 and standard deviation is 0.712. Based on this, the respondents' feedback was nearing to averagely agree and the data collected was much closer to the mean value.

Table 4-4

Forecasting & Analysing Risk using DMT

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	100	51.8	51.8	51.8
	Agree	85	44.0	44.0	95.9
	Neutral	8	4.1	4.1	100.0
	Total	193	100.0	100.0	

Table 4-5

Descriptive Table of Forecasting & Analysing Risk using DMT

	N	Mean	Std. Deviation
Forecasting & Analysing Risk using DMT	193	1.6036	.58598
Valid N (listwise)	193		

According to Table 4-5, the mean value of 1.60 shows the respondents agreed that DMT can be used in forecasting and analysing the uncertainty. Based on Table 4-4, 95.8 percent (n=185) of the respondents agree that DMT can be effectively used in forecasting and analysing risk. Whereas, only 4.1 percent (n=8) of the respondents took a neutral stand.

4.2 Determinants of Accuracy in Decision Making

4.2.1 Time Pressure

H_{o1}: There is no relationship between time pressure and accuracy in decision making.

H_{a1}: There is a relationship between time pressure and accuracy in decision making.

Table 4-6

Correlations – Time Pressure

		Accuracy of Decision Making	Time Pressure
Accuracy of Decision Making	Pearson Correlation	1	.150[*]
	Sig. (2-tailed)		.038
	N	193	193
Time Pressure	Pearson Correlation	.150[*]	1
	Sig. (2-tailed)	.038	
	N	193	193

*. Correlation is significant at the 0.05 level (2-tailed).

Refer to Table 4-6, the p-value 0.038 shows the result is significant at 5% significance level. Since P-value 0.038 is less than 5% significance level, thus reject null hypotheses. Pearson correlation coefficient 0.150 shows that there is a weak positive correlation between time pressure and accuracy of decision making. This result has support the first hypotheses which is there is a relationship between time pressure and accuracy in decision making.

4.2.2 Information Accessible

H_{o2}: There is no relationship between information accessible and accuracy in decision making.

H_{a2}: There is a relationship between information accessible and accuracy in decision making.

Table 4-7

Correlations – Information Accessible

		Accuracy of Decision Making	Information Accessible
Accuracy of Decision Making	Pearson Correlation	1	.439[**]
	Sig. (2-tailed)		.000
	N	193	193
Information Accessible	Pearson Correlation	.439[**]	1
	Sig. (2-tailed)	.000	
	N	193	193

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

Refer to Table 4-7, the p-values 0.000 show the result is significant at 1% significance level. Since P-value 0.000 is less than 5% significance level, thus reject null hypotheses. Pearson correlation coefficient 0.439 shows that there is a moderate weak positive correlation between information accessible and the accuracy of decision making. Information accessible positively influences the accuracy of decision making. This result has support the second hypotheses confirming there is a relationship between information accessible and accuracy in decision making.

4.2.3 Behaviour of Decision Makers

H_{o3}: There is no relationship between behaviour of decision makers and accuracy in decision making.

H_{a3}: There is a relationship between behaviour of decision makers and accuracy in decision making.

Table 4-8

Correlations – Behaviour of Decision Makers

		Accuracy of Decision Making	Behaviour
Accuracy of Decision Making	Pearson Correlation	1	.285[**]
	Sig. (2-tailed)		.000
	N	193	193
Behaviour of Decision Makers	Pearson Correlation	.285[**]	1
	Sig. (2-tailed)	.000	
	N	193	193

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

Refer to Table 4-8, the p-values 0.000 shows that the result is significant at 1% significance level. P-value 0.000 is less than 5% significance level, thus we reject null hypotheses. Pearson correlation coefficient 0.285 shows that there is a below moderate weak positive correlation between behaviour of decision makers with accuracy of decision making. Behaviour of decision makers positively influences the accuracy of decision making where the decision makers can make a good decision when they are in good mood and have clearer mindset. Thus, it supports the third hypotheses that there is a relationship between behaviour of decision makers and accuracy in decision making.

4.2.4 Decision Making Tools (DMT)

H_{o4}: There is no relationship between DMT and accuracy in decision making.

H_{a4}: There is a relationship between DMT and accuracy in decision making.

Table 4-9

Correlations - DMT

		Accuracy of Decision Making	DMT
Accuracy of Decision Making	Pearson Correlation	1	.383[**]
	Sig. (2-tailed)		.000
	N	193	193
DMT	Pearson Correlation	.383[**]	1
	Sig. (2-tailed)	.000	
	N	193	193

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

Table 4-9 shows that the p-values 0.000 is significant at 1% significance level. P-value 0.000 is less than 5% significance level, thus reject null hypotheses. Pearson correlation coefficient of 0.383 indicates that there is a moderate weak positive correlation between DMT and accuracy of decision making. DMT is positively influences the accuracy of decision making. Prior studies also supported that the usage of DMT could improve the decision making process and the accuracy of the decision made. The finding has proven the forth hypotheses which states that there is a relationship between DMT and accuracy of decision making.

4.2.5 Four Factors versus Accuracy of Decision Making

H$_o$: There is no relationship between time pressure, information accessible, behaviour of decision makers and DMT, and accuracy in decision making.

H$_a$: There is a relationship between time pressure, information accessible, behaviour of decision makers and DMT, and accuracy in decision making.

Table 4-10

Multiple Regression Analysis Table

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.494	.244	.228	.711

a. Predictors: (Constant), Behaviour, Time Pressure, Information Accessible, DMT

b. Dependent Variable: Accuracy of Decision Making

Table 4-11

ANOVA Table

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	30.702	4	7.676	15.201	.000^a
	Residual	94.925	188	.505		
	Total	125.627	192			

a. Predictors: (Constant), Behaviour, Time Pressure, Information Accessible, DMT

b. Dependent Variable: Accuracy of Decision Making

Table 4-12

Coefficient Table

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.755	.349		-2.164	.032
	DMT	.275	.157	.142	1.750	.082
	TimePressure	.092	.080	.075	1.147	.253
	InfoAccessible	.637	.148	.321	4.298	.000
	Behaviour	.316	.167	.133	1.900	.059

a. Dependent Variable: Accuracy of Decision Making

Refer to Table 4-11, F test 15.201 (sig=0.000) shows that overall regression function is significant at 1% level. Since the p-value 0.000 is less than 5% significance level, reject null hypotheses. In Table 4-10, R^2 of 24.4% shows that 24.4 percent of the variation in rating of the accuracy of decision making is explained by the regression. Meaning that, about 24.4 percent movements of the dependent variable can be explained using the independent variables in this study.

Refer to Table 4-12, T value of 1.750 shows DMT has no influence on the accuracy of decision making at 5% significance level. T value of 1.147 (sig=0.082) shows that time pressure has no influence on the accuracy of decision making at 5% significance level. T value of 4.298 (sig=0.000) shows information accessible has a positive influence on the accuracy of decision making at 1% significance level. T value of 1.900 (sig=0.059) shows behaviour of decision makers shows behaviour of decision makers has no influence on the accuracy of decision making at 5% significance level. It

means that 3 out of 4 independence variables used in this study have no influence on the accuracy of decision making. This result is not supporting the evidences produced by prior researchers such as Cao et al, (2009), Dror, et al, (1999), Kerstholt (1994), Lee et al, (2008), Marakas (1999), Prelec and Loewenstein (1991) and Workman (2004). Their studies indicated that the accuracy of decision making was influenced by these four independent variables. The results in this study can be summarised as the followings. The correlation's results between (time pressure and accuracy of decision making), (information accessible and accuracy of decision making), (behaviour of decision makers and accuracy of decision making) and (DMT and accuracy of decision making) are significant at 1% significance level even though the correlation were at weaker form. While the regression analysis reveals that only information accessible is significant at 1% significance level in determining the accuracy of decision making. The other three variables, time pressure, behaviour of decision makers and DMT were not significant and did not represent the model as expected.