

**Questionnaire - Section A: Variables, Scale and Measurements for Question 1 to 8**

Question	Variables	Scale	Measurement
1	DMT is easy to use	Ordinal	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree
2	Forecasting	Ordinal	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree
3	Analysing Risk	Ordinal	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree
4	Influence decision making process (DMT1)	Ordinal	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree
5	Increase the accuracy of decision making (DMT2)	Ordinal	1 = Strongly Agree  2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree
6	Like to use DMT (DMT3)	Ordinal	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree
7	Traditional decision making	Ordinal	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree
8	Continue on the usage of DMT	Ordinal	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree

## Questionnaire - Section B: Variables, Scale and Measurements for Question 1 to 13

Question	Variables	Scale	Measurement
1	More time in decision making (TP1)	Ordinal	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree
2	Time pressure (TP2)	Ordinal	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree
3	Time frame given is longer (TP3)	Ordinal	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree
4	Low time pressure will produce accurate results as compared to high time pressure (TP4)	Ordinal	1 = Strongly Agree  2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree
5	Can easily access to the information (IA1)	Ordinal	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree
6	Information will influence on the accuracy of decision making (IA2)	Ordinal	1 = Strongly Agree  2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree
7	More information should be included (IA3)	Ordinal	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree
8	Less information will affect the accuracy of decision making (IA4)	Ordinal	1 = Strongly Agree  2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree

**Questionnaire - Section B: Variables, Scale and Measurements for Question 1 to 13,  
(continued...)**

Question	Variables	Scale	Measurement
9	Behaviours of decision makers (BODM1)	Ordinal	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree
10	Mood of decision makers (BODM2)	Ordinal	1 = Strongly Agree 2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree
11	Characteristic of decision makers (BODM3)	Ordinal	1 = Strongly Agree  2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree
12	Make a better decision when mind is clear (BODM4)	Ordinal	1 = Strongly Agree  2 = Agree 3 = Neutral 4 = Disagree 5 = Strongly Disagree
13	Overall these 4 factors will affect the accuracy of decision making	Ordinal	1 = (Points 1 & 2)-Strongly Agree  2 = (Points 3 & 4)-Agree 3 = (Points 5 & 6)-Neutral 4 = (Points 7 & 8)-Disagree 5 = (Points 9 & 10)-Strongly Disagree

**Questionnaire - Section C: Variables, Scale and Measurements for Question 1 to 7**

<b>Question</b>	<b>Variables</b>	<b>Scale</b>	<b>Measurement</b>
1	Gender	Nominal	1 = Male 2 = Female
2	Age	Ordinal	1 = Less than 18 2 = 19 to 28 3 = 29 to 38 4 = 39 to 48 5 = 49 to 58 6 = Above 58
3	Ethnic Group	Nominal	1 = Indian 2 = Malay 3 = Chinese 4 = Others
4	Education Level	Ordinal	1 = SPM / High School 2 = Diploma / A-Levels 3 = Degree / Professional Certificate 4 = Masters 5 = PHD 6 = Others
5	Working Experience	Ordinal	1 = Less than 2 2 = 2 to 5 3 = 5 to 8 4 = More than 8 years
6	Occupation	Nominal	1 = Executive 2 = Manager 3 = Professional 4 = Own Business 5 = Others
7	Income Level	Ordinal	1 = Less than RM 2000 2 = RM 2001 to RM 4000 3 = RM 4001 to RM 6000 4 = RM 6001 to RM 8000 5 = RM 8001 to RM 10000 6 = More than RM 10000

**Multiple Regression Analysis**

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \mu_t$$

Whereby, Y represents dependant variable,  
X<sub>1</sub>, X<sub>2</sub>, X<sub>3</sub>, X<sub>4</sub> represent independent variables,  
 $\mu$  is referred to as the error term or disturbance,  
 $\alpha$  is the intercept, and  
 $\beta_1$ ,  $\beta_2$ ,  $\beta_3$ ,  $\beta_4$  represent the slope.

Accuracy of Decision Making =  $\alpha$  +  $\beta$  (Time Pressure) +  $\beta$  (Information Accessible) +  $\beta$  (Behaviour of Decision Makers) +  $\beta$  (Decision Making Tools) +  $\mu$

**Bivariate Correlation**

$$\text{Corr}(x, y) = (X_1, Y_1), (X_2, Y_2) \dots (X_n, Y_n)$$

Whereby, X and Y represent two random variables.

$$\text{Corr}(r) = [N\sum XY - (\sum X)(\sum Y) / \text{Sqrt} ([N\sum X^2 - (\sum X)^2][N\sum Y^2 - (\sum Y)^2])]$$

Whereby, N = Number of values or elements,

X = First Score,

Y = Second Score,

$\sum XY$  = Sum of the product of first and Second Scores,

$\sum X$  = Sum of First Scores,

$\sum Y$  = Sum of Second Scores,

$\sum X^2$  = Sum of square First Scores and

$\sum Y^2$  = Sum of square Second Scores.

By using the correlation model, four models are created as below:

i. Corr (Accuracy of Decision Making, Time Pressure)

$$= \sum_{i=1}^n (\text{Accuracy of Decision Making}_i, \text{Time Pressure}_i)$$

ii. Corr (Accuracy of Decision Making, Information Accessible)

$$= \sum_{i=1}^n (\text{Accuracy of Decision Making}_i, \text{Information Accessible}_i)$$

iii. Corr (Accuracy of Decision Making, Behaviour of Decision Makers)

$$= \sum_{i=1}^n (\text{Accuracy of Decision Making}_i, \text{Behaviour of Decision Makers}_i)$$

iv. Corr (Accuracy of Decision Making, Decision Making Tools (DMT))

$$= \sum_{i=1}^n (\text{Accuracy of Decision Making}_i, \text{Decision Making Tools (DMT)}_i)$$



**GRADUATE SCHOOL OF BUSINESS**  
**FACULTY OF BUSINESS & ACCOUNTANCY**  
**UNIVERSITY OF MALAYA**

Dear Sir / Madam,

I am currently pursuing my Master Degree in Business Administration (MBA) majoring in Finance at the Faculty of Business & Accountancy, University of Malaya. As partial fulfillment towards the completion of postgraduate degree, I'm conducting a research on **“Determinants of Accuracy in Decision Making and Usage of Decision Making Tools among Managers in Malaysia”**.

Decision Making Tools (DMT) which also known as Decision Support Systems (DSS) are computer information systems which provide information as a basis for non-routine, semi-structured, decision making. DMT facilitates decision making process and commonly used to structure information, identify and solve problems and simulate future performance. Some of the decision making software available in the market are SAS, Simul8, SPSS, E-View, Arena, GoldSim and Project Management. The main objective of this research is to analyze the determinants that influence the accuracy of decision making in corporate world, which includes the use of DMT.

Hence, I sincerely invite you to kindly contribute by completing this brief survey. The completed questionnaire shall be returned to me via e-mail.

All information will be treated highly confidential and shall only be used for the purpose of this academic research. Your participation is very much appreciated.

Thank you for your co-operation and assistance.

Yours Sincerely,

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## **SECTION A: ROLES & CONTRIBUTION OF DMT IN MALAYSIA**

**1. Do you feel DMT is easy to use?**

Strongly Agree     Agree     Neutral     Disagree     Strongly Disagree

**2. Do you think DMT can be used in forecasting?**

Strongly Agree     Agree     Neutral     Disagree     Strongly Disagree

**3. Do you think DMT can be used in analysing risks?**

Strongly Agree     Agree     Neutral     Disagree     Strongly Disagree

**4. Do you think DMT can add value or influence the decision making process?**

Strongly Agree     Agree     Neutral     Disagree     Strongly Disagree

**5. Do you think the usage of DMT will increase the accuracy of decision making?**

Strongly Agree     Agree     Neutral     Disagree     Strongly Disagree

**6. Do you like to use DMT in the decision making process?**

Strongly Agree     Agree     Neutral     Disagree     Strongly Disagree

**7. Do you agree traditional decision making process is slower?**

Strongly Agree     Agree     Neutral     Disagree     Strongly Disagree

**8. Do you think your organisation should continue on the usage of DMT in decision making?**

Strongly Agree     Agree     Neutral     Disagree     Strongly Disagree



## **SECTION B: DETERMINANTS OF ACCURACY IN DECISION MAKING**

**1. Do you prefer to have more time in decision making?**

Strongly Agree     Agree     Neutral     Disagree     Strongly Disagree

**2. Do you agree time pressure will influence the accuracy of decision making?**

Strongly Agree     Agree     Neutral     Disagree     Strongly Disagree

**3. Do you think you will be able to make better decisions when longer time given to you?**

Strongly Agree     Agree     Neutral     Disagree     Strongly Disagree

**4. Do you agree that low time pressure can contribute to higher accuracy in decision making?**

Strongly Agree     Agree     Neutral     Disagree     Strongly Disagree

**5. Could you easily access to the information you want while making the decision?**

Strongly Agree     Agree     Neutral     Disagree     Strongly Disagree

**6. Do you think information accessible can influence the accuracy of decision making?**

Strongly Agree     Agree     Neutral     Disagree     Strongly Disagree

**7. Do you agree more information should be available when making decision?**

Strongly Agree     Agree     Neutral     Disagree     Strongly Disagree

**8. Do you think limited information can affect the accuracy of the decision made?**

Strongly Agree     Agree     Neutral     Disagree     Strongly Disagree

**9. Do you think the behaviours of decision makers can influence the decision making process?**

Strongly Agree     Agree     Neutral     Disagree     Strongly Disagree

**10. Do you think the mood of decision makers can affect the accuracy of decision making?**

Strongly Agree     Agree     Neutral     Disagree     Strongly Disagree

**11. Do you agree characteristic of decision makers can affect the decision result?**

Strongly Agree     Agree     Neutral     Disagree     Strongly Disagree

**12. Do you agree that you will be able to make a better decision when you have a clear mindset?**

Strongly Agree     Agree     Neutral     Disagree     Strongly Disagree

13. Do you agree that time pressure, information accessibility, behaviours of decision makers and DMT will influence the accuracy of decision making?

Please **circle** the answer:(10-point scale:- 1 representing **Strongly Agree** & 10 representing **Strongly Disagree**)

1            2            3            4            5            6            7            8            9            10

**SECTION C: DEMOGRAPHIC PROFILE**

Please only insert [v ] or highlight [Ⓜ] one for every question that best indicates your answer.

1. Gender                     Male                     Female

2. Age

Less than18                     19 to 28                     29 to 38                     39 to 48  
 49 to 58                     Above 58

3. Ethnic Group

Indian                     Malay                     Chinese                     Others

4. Highest Education Level

SPM / High School                     Diploma / A-Levels  
 Degree / Professional Certificate                     Masters  
 PHD                     Others, please specify \_\_\_\_\_

5. Years of service in your current organization

Less than 2                     2 to 5                     5 to 8                     More than 8 years

6. Occupation

Executive                     Manager                     Professional  
 Own Business                     Others, please specify \_\_\_\_\_

7. Current Income Level

Less than RM 2000                     RM 2001 to RM 4000                     RM 4001 to RM 6000  
 RM 6001 to RM 8000                     RM 8001 to RM 10000                     More than RM 10000

~ **Thank you for your participation** ~