

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the research methodology used in this study including the research design, and the instruments, and their reliability. The chapter then discusses the sampling approach, pilot test study and data collection. Lastly, the data analysis procedure that was applied to test the hypotheses is also explained.

3.2 Research Paradigm

In research, “paradigms reflect the basic set of philosophies that are related to the nature of the world” (Hair et al, 2017). These basic philosophical beliefs of the researcher reveal the perception he holds of the world, and reality, and how he understands this reality along with the methods that assist him in obtaining the knowledge regarding a particular reality (Thomas, 2003). Scholars have the view that, in justifying a particular approach to reality, the ontological, epistemological, and methodological basis is necessary (Zalan & Lewis, 2004; Banister et al, 2011). For any research paradigm, four main points must be elaborated upon by the researcher. These points are related to the nature of the phenomenon under study, the relationship

of the researcher with the phenomenon, the methodology, including the method or technique to study the phenomenon (Easterby-Smith et al., 2012; Gringeri et al., 2013).

The concept of reality, or the “social phenomena under investigation” depends on the researcher’s understanding of its nature and issues, and how he/she will gather knowledge and information. Ekanem (2007) argues that a research approach that is explicit in nature will lead to appropriate research design. Researchers also hold the view that all research approaches, whether ontological, epistemological, theoretical, and methodological, are interrelated with one another (Hesse-Biber & Leavy, 2010). Therefore, the researcher needs to be clear about which method best answers the research questions. Nevertheless, most researchers favor quantitative methods for their robust and scientific approach (Saunders et al., 2012; Ghauri & Gronhaug, 2005). Hence, for the present study, the researcher used a quantitative approach to data collection for research objectives one, two and three.

3.3 Research Design

Overall, this research is quantitative in nature for the ease of “collecting observable and measurable data” on the variables. Therefore, in this research, quantitative data was collected based on structured closed-ended questions on a Likert scale. Moreover, quantitative research is more appropriate for understanding how one or more variables can influence one another (Creswell, 2009). This method involves structured questions where the response selections are fixed, and several respondents are involved. Some past studies have used the Likert scale to measure the variables under consideration

because such a scale has been shown to have high validity (Zehir et al., 2011; Henard & Dacin, 2010). Also, Dawes (2008) indicated that the Likert scale is suitable for data used for factor analysis, regression analysis, or structural equation modeling.

3.4 Population and Sampling

Population is the whole group that the researcher is interested in examining and obtaining information from (Bryman, 2000). The target population in this study was officers handling the ministerial Corporate Communications Unit, specifically, the Strategic Communications Officers, in 27 Malaysian government ministries. This is because these officials have more knowledge about the social media usage in their respective ministries and have been given mandate to control the ministry's social media sites. However, according to Hair et al. (2010), the reliability of the data can be frequently impacted by underlying contextual and cultural factors. Thus, being aware of the respondents' cultural backgrounds is important for a highly reliable result. This study followed Churchill and Iacobucci's (2009) sampling process and procedures, shown in Figure 3.1.

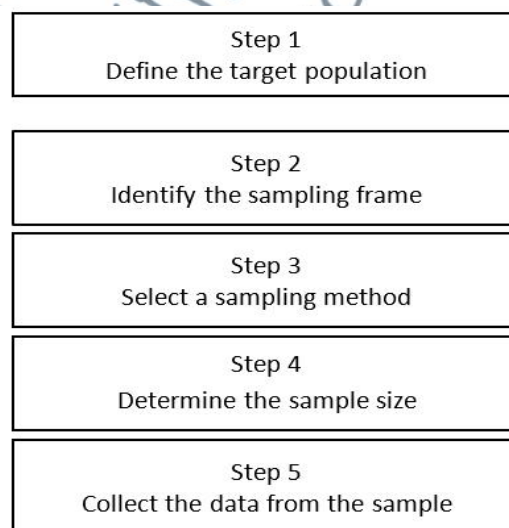


Figure 3.1: Sampling Procedure

Therefore, in this study, officers in corporate communications from 27 government ministries in Malaysia were identified as the target population.

3.4.1 Identification of the Sampling Frame

The second step in the sampling procedure is to determine the sampling frame. The sampling frame is a list of all cases in the population from which the sample is drawn (Saunders et al. 2012). Choosing an appropriate sampling frame for the current study depends on the characteristics of the target population under investigation, and the sources available for the identification of the potential subjects. 95 officers in corporate communications from 27 government ministries in Malaysia formed the sampling frame for this study. The distribution of this population is shown in Table 3.1.

Table 3.1: Population

No	Ministry	Location	Number of Population
1	Home Affairs	Putrajaya	3
2	Finance	Putrajaya	4
3	Defense	KL	3
4	Education	Putrajaya	13
5	Health	Putrajaya	13
6	Housing and Local Government	Putrajaya	1
7	Agriculture and Agro-Based Industry	Putrajaya	2
8	Rural Development	Putrajaya	3
9	Domestic Trade and Consumer Affairs	KL	1
10	Youth and Sports	Putrajaya	7
11	Communication and Multimedia	Putrajaya	8

No	Ministry	Location	Number of Population
12	Human Resources	Putrajaya	3
13	Transport	Putrajaya	2
14	Economic Affairs	Putrajaya	1
15	Women, Family and Community Development	Putrajaya	3
16	Entrepreneur Development	Putrajaya	2
17	Water, Land and Natural Resources	Putrajaya	2
18	Works	Putrajaya	6
19	Foreign Affairs	Putrajaya	2
20	Primary Industries	Putrajaya	3
21	Energy, Science, Technology, Environment & Climate Change	Putrajaya	2
22	Federal Territories	Putrajaya	2
23	International Trade and Industry	Putrajaya	3
24	Tourism, Arts and Culture	Putrajaya	5
25	Prime Minister's Office	Putrajaya	1
26	Higher Education	Putrajaya	3
27	Unity	Putrajaya	2
		TOTAL	98

3.4.2 Sampling

The collection of research data was derived from the identified sample from the specified areas which represent the population through manageable cost, and other resources, and especially to curb geographical constraints (Sekaran, 2003). The right technique for sampling is crucial to meet the needs of empirical research. The sampling method for this study was a stratified random sampling of officers in the Corporate Communications Unit. Gay (1987) reported that stratified random sampling is “an appropriate sampling method in order to make proportionate, and therefore meaningful, comparisons between sub-groups in the population.”

Pallant (2010) supported the view that stratified random sampling is an appropriate choice under the sampling theory due to its nature of having the closest means of representing a study population. Finally, Leary (1995) indicated that the characteristics drawn upon the overall population through stratified random sampling are naturally able to be generalized to the population efficiently. These officers had been identified in the 27 ministries to extract information-rich data from a diverse subject pool. These efforts were undertaken to gain valuable insight which would inform the study.

3.4.3 Sample Elements

A sample element is defined as “the name for a case or single unit to be sampled” (Neuman, 2006). The selection of the Strategic Communications Officers was done according to their geographical locations, which were Putrajaya and Kuala Lumpur. 98 officers from the Corporate Communications Units of 27 government ministries in Malaysia, located in Putrajaya and Kuala Lumpur, were chosen as the population of the study.

3.4.4 Sample Size

Sample size is also an important component of a research study as it could distort the reliability of the factor analysis, and the accuracy of a model (Field, 2005). Green (1991) pointed out that a larger sample size would more closely represent the population and minimize sample errors. Referring to Tabachnick and Fidel (1996), a small sample size could create less reliable correlation coefficients. In the current study, sample size is a critical factor because it uses SEM to test the proposed structural model and hypotheses. To determine the number of participants for an

adequate sample size, this study used the total target population, which was 98. Based on Krecjie and Morgan (2007), for the 98 Corporate Communications Officers in 27 Malaysian government ministries located in Putrajaya and Kuala Lumpur, the recommended sample size was 80. The stratified random sampling calculation is as shown in Table 3.2 below:

Table 3.2: Stratified Random Sampling Calculation for Sample Size

No	Ministry	Location	Number of Population	Percentage of Sampling	Number of Sampling
1	Home Affairs	Putrajaya	3	$3/98*80$	2
2	Finance	Putrajaya	4	$4/98*80$	3
3	Defense	KL	3	$3/98*80$	2
4	Education	Putrajaya	13	$13/98*80$	10
5	Health	Putrajaya	13	$13/98*80$	10
6	Housing and Local Government	Putrajaya	1	$1/98*80$	1
7	Agriculture and Agro-Based Industry	Putrajaya	2	$2/98*80$	2
8	Rural Development	Putrajaya	3	$3/98*80$	2
9	Domestic Trade and Consumer Affairs	KL	1	$1/98*80$	1
10	Youth and Sports	Putrajaya	7	$7/98*80$	6
11	Communication and Multimedia	Putrajaya	8	$8/98*80$	7
12	Human Resources	Putrajaya	3	$3/98*80$	2
13	Transport	Putrajaya	2	$2/98*80$	2
14	Economic Affairs	Putrajaya	1	$1/98*80$	1
15	Women, Family and Community Development	Putrajaya	3	$3/98*80$	2

16	Entrepreneur Development	Putrajaya	2	2/98*80	2
17	Water, Land and Natural Resources	Putrajaya	2	2/98*80	2
18	Works	Putrajaya	6	6/98*80	5
19	Foreign Affairs	Putrajaya	2	2/98*80	2
20	Primary Industries	Putrajaya	3	3/98*80	2
21	Energy, Science, Technology, Environment & Climate Change	Putrajaya	2	2/98*80	2
22	Federal Territories	Putrajaya	2	2/98*80	2
23	International Trade and Industry	Putrajaya	3	3/98*80	2
24	Tourism, Arts and Culture	Putrajaya	5	5/98*80	4
25	Prime Minister's Office	Putrajaya	1	1/98*80	1
26	Higher Education	Putrajaya	3	3/98*80	2
27	Unity	Putrajaya	3	3/98*80	2
		TOTAL	98		80

3.5 Unit of Analysis

Unit of analysis refers to the major entity in research and is the most important consideration for analysis. Sekaran (2003) defined the unit of analysis as the “level of aggregation of the data collected during the subsequent data analysis stage.” Accordingly, the unit of analysis for this study was at the individual level; thus, under the sample elements, the officers, specifically those who work in corporate communications in 27 government ministries located in Putrajaya and Kuala Lumpur, Malaysia, were the most appropriate respondents for this study.

3.6 Development of Measurement

The researcher adopted the measuring instruments for every latent construct from literature. For the pre-test and pilot test, the researcher sent the questionnaire to a selected panel of experts. The questionnaire was used as a tool to collect the data, based on the variables proposed in the conceptual framework. Its reliability was tested with the Cronbach's alpha coefficient, whereby only items with values of no less than 0.70 were recognized (Hair et al. 2010). In addition, the construct validity for the main study was tested using confirmatory factor analysis.

3.7 Survey Questionnaire

This research follows the questionnaire design, which was suggested by Sekaran and Bougie (2010). The survey questionnaire was dual language (English and Bahasa Malaysia). According to Saunders et al. (2012), a longer questionnaire will relatively reduce response rates compared to a shorter questionnaire; thus, the general rule is to keep questionnaires as short as possible. As suggested by Smith and Dainty (1991), the questionnaires were also accompanied by background information, and an explanatory cover letter which assured the confidentiality of responses.

Quantitative data was collected based on structured closed-ended questions. Three measures were used in this study to test the proposed hypotheses. In total, the questionnaire comprised of four (4) parts, namely Section A: Demographic Characteristics, Section B: Interactivity, Section C: Top Management Support, Section D: Training and Development, Section E: Islamic Work Ethics, Section F: E-Government Performance, and Section G: Social Media Usage. The questionnaire used a five-point Likert scale, where 5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, and 1 = Strongly Disagree.

3.7.1 Section A: Demographic Characteristics

Data on the demographic characteristics of the respondents was collected via a questionnaire developed by the researcher. Characteristics addressed by the

questionnaire were (a) Ministry, (b) level in organization, (c) role in decision making, (d) social media sites, e) years of experience, f) practice using social media, g) post frequency, and h) social media usage (per day). The characteristics chosen were based on a review of the related literature. The items are shown in the following Table 3.3.

Table 3.3: Demographic Characteristics

Items	Details
<i>Ministry</i>	Please state your ministry
<i>Level in Organization</i>	Senior Management Middle Management Executive Other
<i>Role in Decision Making</i>	Yes No
<i>Social Media Sites</i>	Facebook Twitter Instagram YouTube Blog Others
<i>Years of Experience</i>	Less than 1 year 1-5 years 6-10 years More than 11 years
<i>Practice Using Social Media</i>	Less than 1 year 1-5 years 6-10 years More than 11 years
<i>Post Frequency</i>	Within 1 hour A day A week A month

<i>Social Media Usage (Per Day)</i>	Less than 1 hour
	1-2 hours
	3-4 hours
	5-6 hours

3.7.2 Section B: Interactivity

The present study has adopted the four items on Interactivity that were prepared by Lee and Kozar (2012) and are displayed in Table 3.4.

Table 3.4: Items of Social Media Interactivity

Code.	Items
SMI1	The interactive features of the social media sites that my ministry uses (e.g., Facebook and Twitter) are vivid, and evoke responses.
SMI2	The social media sites provide features for interactive communication with our Malaysian citizens.
SMI3	The social media sites provide an appropriate number of interactive features (e.g., graphics, pop-up windows, animation, music, voices).
SMI4	The social media sites contain components to help the interaction between it and Malaysian citizens.

3.7.3 Section C: Top Management Support

The present study has adopted the four items on top management support that were prepared by Teo and Pian (2003), Chong and Chan (2012), Wang et al. (2010), and Liang et al. (2007) and are displayed in Table 3.5.

Table 3.5: Items of Top Management Support

Code.	Items
TMS1	Top management considers social media adoption as important to the ministry.
TMS2	Top management effectively communicates its support for the use of social media.
TMS3	Top management is likely to invest funds in social media technology.
TMS4	Top management had established goals and standards to monitor social

media usage in the ministry.

3.74 Section D: Training

The present study has adopted the five items on training that was prepared by Junaidah Hashim (2010) and are displayed in Table 3.6.

Table 3.6: Items of Training and Development

Code.	Items
T1	My organization emphasizes improving one's performance.
T2	My organization conducts Islamic training programs for employees regularly.
T3	My organization encourages employees to seek knowledge.
T4	My organization conducts training regularly in this organization.
T5	This organization promotes training seriously.

3.7.5 Section E: Islamic Work Ethics

The present study has adopted the 17 items on Islamic Work Ethics support that was prepared by Ali (1992) and are displayed in Table 3.7.

Table 3.7: Items of Islamic Work Ethics

Code.	Items
IWE1	Laziness isn't a good virtue.
IWE2	Dedication to work is a virtue.
IWE3	Good work benefits both oneself and others.
IWE4	Justice and generosity in the workplace are necessary conditions for society's welfare.
IWE5	Producing more than enough to meet one's needs contributes to the prosperity of society.
IWE6	One should carry work out to the best of one's ability.
IWE7	Work is not an end, but a means to foster personal growth and social relations.

- IWE8 Life has no meaning without work.
- IWE9 More leisure time is good for society.
- IWE10 Human relations should be emphasized and encouraged.
- IWE11 Work enables man to control nature.
- IWE12 Creative work is a source of happiness and accomplishment.
- IWE13 Any person who works is more likely to get ahead in life.
- IWE14 Work gives one the chance to be independent.
- IWE15 A successful person is the one who meets deadlines at work.
- IWE16 One should constantly work hard to fulfil responsibilities.
- IWE17 The value of work is derived from the accompanying intention rather than its result.
-

3.7.6 Section F: E-Government Performance

The present study has adopted the five items on e-government performance that were prepared by Al Shibly (2015) and are displayed in Table 3.8.

Table 3.8: Items of E-Government Performance

Code.	Items
EGP1	Malaysian netizens believe that my ministry should use social media.
EGP2	Malaysian netizens wish that my ministry uses social media.
EGP3	Other government ministries that have adopted social media have benefited greatly.
EGP4	Other government ministries that use social media are perceived favorably by Malaysian netizens.
EGP5	Other government ministries that have adopted social media are more competitive.

3.7.7 Section G: Social Media Usage

The present study has adopted the 13 items on Social Media Usage that were prepared by Tajudeen (2014) and are displayed in Table 3.9.

Table 3.9: Items of Social Media Usage

Code.	Items
My government uses social media	
SMU1	For advertising and promoting the government's products and services
SMU2	For branding
SMU3	For conducting market research
SMU4	For getting referrals (word of mouth via likes, shares, and followers on Facebook, Twitter, etc..)
SMU5	To develop customer relations
SMU6	To communicate with customers
SMU7	For customer service activities
SMU8	To receive customer feedback on the government's existing products and services
SMU9	To receive customer feedback on new or future products or services
SMU10	To reach new customers
SMU11	To search for general information
SMU12	To search for competitor/vendor/supplier information
SMU13	To search for customer information

3.8 Data and Statistical Analysis

Two major statistical programmes, IBM SPSS Version 23.0 and Smart PLS Version 23.0, were used to evaluate the survey data. Descriptive analysis was carried out by computing the demographic background in frequencies and percentages using IBM SPSS Version 23.0. The inferential statistical analysis utilised to assess the predictive roles of social media usage, interactivity, top management support, e-government performance, training, and Islamic work ethics was performed in Smart PLS Version 23.0. The Smart PLS is a piece of software for conducting Confirmatory

Factor Analysis, which verifies the accuracy of the measurement model for a latent construct (CFA). Therefore, Smart-PLS (version 23.0) was utilised to execute the CFA, check the measurements' validity and reliability, and conduct the hypothesis structural model test.

Using frequency and percentage calculations in IBM SPSS Version 23.0, we were able to ascertain the respondent demographics. With the use of Structural Equation Modeling (SEM), scientists may see if their findings are supported by reality (Babin & Svensson, 2012). SEM incorporates both factor analysis and multiple regression analysis, allowing for simultaneous study of extremely complicated models with precise fitness metrics (Tohidi et al., 2012; Urbach & Ahlemann, 2010). SEM (Structural Equation Modeling) is a sophisticated method of statistical analysis that has found widespread application, not only in the social sciences but also in other fields. In most cases, confirmation is the primary goal when employing partial least square SEM (PLS-SEM) (Hair et al., 2012; Sinkovics et al., 2016; Urbach & Ahlemann, 2010). To account for measurement errors in observable variables, PLS-SEM techniques incorporate latent variables that are measured indirectly (Hair et al., 2016; Henseler & Chin, 2010; Urbach & Ahlemann, 2010).

According to Avkiran (2017), factors such as data type, sample size, number and types of latent constructs tested, and underlying theory influence the decision between adopting PLS-SEM or another approach. Because it is well-suited for "small sample sizes, the data are non-normally distributed, or when complicated models with multiple indicators and model linkages are estimated" (Hair et al., 2011), PLS-SEM

was used to analyse the relationships between the components (Hair et al., 2016). In addition, it works well when there is less certainty about the relationships between the variables, as in an exploratory study, where the researchers are instead trying to "search for latent patterns in the data" (Hair et al., 2016).

Davcik (2014) added support for this view by arguing that PLS-SEM provides interpretive value to the theoretical underpinnings of a model. PLS-SEM seems like the best option for analysing the data in this study because of its exploratory nature. As there was nothing in the way of concrete information on the connections between these factors, it was put to use to examine patterns in the data (Hair et al., 2016). The usage of a complicated model with a large number of constructs was a second requirement for PLS-SEM (Henseler, Hubona, & Ray, 2016). Before employing the Inner Model to estimate the predictive prevalence and effect size in PLS-SEM, the Outer Model was utilised to establish the validity and reliability of the latent variables (all constructs being reflective) (Hair et al., 2011).

3.9 Assessing PLS Path Model

In this research, the use of PLS Path Model is being utilized, there are two steps involved in completing these criteria systematically: (1) evaluating the exterior model and (2) evaluating the inner model. This two-step procedure is shown in Figure 3.2. As for the model assessment, there are steps taken, and the first of the two steps in the procedure concentrates on the measurement models. The measurement validity and reliability are revealed by a methodical assessment of the PLS estimate based on certain standards related to the formative and reflective outer models..

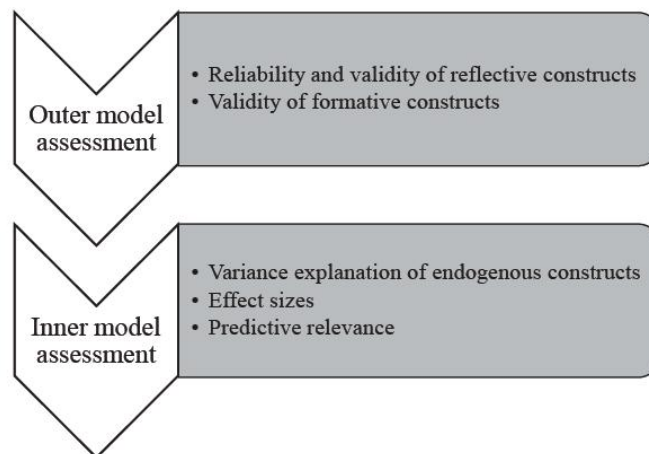


Figure 3.2: PLS Path Model

Table 3.10 describes the different criteria used to evaluate reflective measurement models, including cross loadings, average variance extracted (AVE), indicator reliability, composite reliability, and Fornell-Larcker criterion.

Table 3.10: Assessing Reflective

Measurement Model Criterion	Description
Composite reliability	As an indicator of internal consistency, the composite dependability cannot be less than 0.6.
Indicator reliability	It is recommended that absolute standardised outer (component) loadings exceed 0.7.
Average variance extracted (AVE)	There should be greater variability removed on average than 0.5.
Fornell – Larcker criterion	The AVE of every latent variable must be greater than the squared correlations with every other latent variable in order to guarantee discriminant validity. As a result, when compared to another latent variable that

represents a different block of indicators, each latent variable shares a greater amount of variation with its own block of data.

Cross-loadings

An additional way to verify discriminant validity is using cross-loadings. The suitability of the model should be reevaluated if an indicator shows a greater correlation with a different latent variable than it does with its own latent variable.

3.10 Assessing the Structural model

Reliable and valid outer model estimations permit an evaluation of the inner path model estimates. Table 3.15 explains the criteria for assessing the structural model. The structural model can be evaluated using the values of R^2 and estimation of path coefficients. More in-depth analysis can also be done by assessing the values of effect size f^2 and predictive relevance Q^2 and q^2 . Apart from these, the non-parametric bootstrap (Davison, Hinkley, & Young, 2003; Efron & Tibshirani, 1993) procedure can be used in PLS path modeling to provide confidence intervals for all parameter estimates, building the basis for statistical inference. In general, the bootstrap technique provides an estimate of the shape, spread, and bias of the sampling distribution of a specific statistic. Bootstrapping treats the observed sample as if it represents the population. The procedure creates a large, pre-specified number of bootstrap samples (eg. 5,000). Each bootstrap sample should have the same number of cases as the original sample. Bootstrap samples are created by randomly drawing cases with replacement from the original sample (Henseler, Ringle, & Sinkovics, 2009). Table 3.11 shows the criterion to assess the structural model.

Table 3.11: Assessment of Structural Model Criterion

	Description
R ² of endogenous latent variables	R ² values of 0.67, 0.33, or 0.19 for endogenous latent variables in the inner path model are described as substantial, moderate, or weak by Chin (1998).
Estimates for path coefficients	The estimated values for path relationships in the structural model should be evaluated in terms of sign, magnitude, and significance (the latter via bootstrapping).
Effect size f^2	$f^2 = (R_{2\text{included}} - R_{2\text{excluded}}) / (1 - R_{2\text{included}})$; values of 0.02, 0.15, and 0.35 can be viewed as a gauge for whether a predictor latent variable has a weak, medium, or large effect at the structural level.

For this study, the data analysis was performed using SmartPLS 2.0 software. The PLS technique is used as the study contains both formative and reflective constructs and also the sample size is small.

3.11 Pilot Test

The evaluation of consistency between several measurements of a variable is known as reliability. A reliability analysis was performed on the survey instrument's items. Teachers in Malaysian government schools who are in charge of social media usage served as the respondents for the pilot-test research. A total of 33 government

teachers were contacted to complete the pilot test questionnaire, which was distributed between March and May of 2019. According to Alreck & Settle (1995), dependability is the extent to which survey results are devoid of random error as opposed to systematic bias. It also refers to the capacity of measures to produce consistent results (Blaikie, 2003). Kerlinger & Lee (2000) noted that synonyms to reliability are dependability, stability, consistency, reproducibility, predictability and lack of distortion.

One type of reliability measure that is widely used is the Cronbach's Alpha. According to Black (1999), Cronbach's Alpha is a measure that provides a reliability coefficient to indicate internal consistency of the instrument. The closer Cronbach's Alpha is to 1.00, the higher is the reliability of the measures. The generally agreed upon lower limit for Cronbach's Alpha is .70 (Hair et al., 2018). An examination of the Cronbach's Alpha for the reliability tests for each variable is presented in the Table 3.1 below:

Table 3.12: Cronbach's Alpha for the reliability tests

Variable	No. of Items	Cronbach's Alpha
Interactivity	4	.930
Top Management Support	4	.853
Work Ethics	15	.862
Training & Development	5	.815
Government Performance	5	.905

All Cronbach's Alpha results were above the .70 level. Hence, this suggests that the instrument is reliable and can be used to measure the intended study.

3.11 Ethical Consideration

From the researcher's perspective, several ethical issues must be addressed. Firstly, the researcher is responsible for keeping the information provided by the respondents as strictly confidential and safeguarding their privacy. Furthermore, the self-respect and self-esteem of the respondents should never be disregarded, and no one should be compelled to respond to the survey. In this case, a respondent consent form is included in the questionnaire (Sekaran & Bougie, 2016).

In addition, ethical approval is also obtained from relevant authorities in Malaysia. The researcher also establishes a list of selected government Corporate Communication Unit, especially Strategic Communication Officials to be included as the samples representing the study population. Then, the researcher contacted respective directors via email through Human Resources Departments and Corporate Communication Unit Directors, the in each government ministries to obtain the respondent list.

3.12 Data Collection

To ensure the smooth progression of this study, the researcher implemented several procedures. The initial step involved the verification of the questionnaire, for which permission was sought from experts affiliated with two prominent institutions: Universiti Sains Islam Malaysia, and Universiti Kuala Lumpur. After receiving feedback from these experts, the questionnaire underwent necessary improvements.

The subsequent phase entailed conducting a pilot study. This was essential to assess the reliability and validity of the research instrument and ensure it met the required standards. A total of 33 Malaysian government school teachers who are in charge of social media usage served as the respondent this pilot study. Following the successful pilot study, the researcher sought permission from twenty seven government ministries located in Putrajaya and Kuala Lumpur which was listed in Table 3.1 : Population. Once the necessary permissions were obtained, the questionnaire was self administered by the respondents.

3.12 Conclusion

The process for evaluating the research's conceptual framework has been laid out in great detail in this chapter. This study's research methodology, demographic, sample, data collection strategy, questionnaire development, pilot test, ethical consideration and variable measurement are all discussed. The methods of analysis used to verify the hypotheses presented in Chapter 2 have also been detailed. In addition, the content analysis method was outlined in this chapter to address the first research objective.

Results from the study, including those from the analysis of assumptions, exploratory factor analysis, and the validity of the measurement and structural models, will be discussed in detail in the following chapter (Chapter 4). In order to determine if the study's hypotheses hold up under scrutiny, the conceptual framework will be put to the test repeatedly throughout the debate.