## **CHAPTER 3**

#### **RESEARCH METHODOLOGY**

## 3.1 Introduction

This chapter described the methodology used in this research. This chapter is divided into three major sections. The chapter begins with an explanation of the research design. The next section details the explanation of the first phase approach employed in this research, i.e. quantitative approach including sampling design, survey research design, research variables, questionnaire, pilot study, data collection procedure, and data analysis. Furthermore, the next section explains the second phase, i.e. qualitative research, which explained the interview method, data collection procedure, and data analysis. The final section provides a summary of the chapter.

This chapter described the methodology used in this research. This chapter is divided into three major sections. The chapter begins with an explanation of the research design. The next section details the explanation of the first phase approach employed in this research, i.e. quantitative approach including sampling design, survey research design, research variables, questionnaire, pilot study, data collection procedure, and data analysis. Furthermore, the next section explains the second phase, i.e. qualitative research, which explained the interview method, data collection procedure, and data analysis. The final section provides a summary of the chapter.

### 3.2 Research Paradigms

A research study's design is often focused on choosing a subject and a research paradigm (Creswell, 2008). The definition of a paradigm or research philosophy focuses on the existence, knowledge creation, and assumption that data should be collected and analyzed for a particular research style (Abdullah, 2019).

This study applied philosophical and quantitative qualitative methods postpositivism. This is because positivism believes that reality exists "out there" (Creswell, 2014), and it is observable, stable, and measurable (Abdullah, 2019). This will allow a researcher to expect a particular phenomenon from which a researcher can formalize a model or paradigm (Saidon, 2012). Post positivism acknowledges that learning is relative and not absolute (Creswell, 2014). The goal is to make predictions or hypothesis tests, to track and generalize the results (Creswell, 2014; Abdullah, 2019).

### 3.3 Research Design

Zikmund (2003) defined a research design as a master plan specifying the methods and procedures for collecting and analyzing the needed information. It is a framework or blueprint that plans of action for this research. Essentially, this present study was adopting pure research or basic research done for the sake of the extension of knowledge or knowledge contribution or developing and extending understanding of specific phenomenon within the evolving field of organizational learning (Zikmund, 2003). Likewise, Sekaran and Bougie (2016) identified basic or fundamental research primarily to enhance understanding and seek methods of solving specific problems commonly occurring in organizational settings.

This research combined both quantitative and qualitative methods, resulting in the sequential mixed process. Campbell and Fiske (1959) pioneered different testing methods to test the validity of psychological attributes (Creswell, 2017). The mixed methodology was rooted in a researcher's tendency to logically underpin the knowledge statements, such as consequence-oriented, problem-centred, and pluralistic. It advocated for using various inquiry tactics that called for data collection either concomitantly or consecutively to dissect the research problems proposed to the best ability. Therefore, the scholar may opt to undertake a preliminary appraisal of a large number of individuals before inquiring with a select few regarding their language and perception regarding the topic. In these particular circumstances, the benefits of obtaining both close-ended quantitative data and open-ended qualitative data collectively were found to elevate one's endeavour to comprehend a research problem better.

Furthermore, opting for various techniques was also advantageous in expediting scholarly efforts regarding organizational learning capability. According to Li et al. (2009), collectively employing qualitative or interpretive and quantitative techniques was a considerably promising action in enhancing one's knowledge regarding the topic. The approach of mixed methods was comparatively novel compared to quantitative and qualitative research designs. Still, improvements in the field justified the implementation of such methodology that was an amalgamation of both approaches.

According to Creswell and Plano Clark (2017), mixed-method research has been identified as a research design that combines qualitative and quantitative techniques during the academic process. It was meant to improve one's understanding of the research issue compared to a singular approach. The two research approaches included dissimilar but interdependent attitudes towards data collection, structuring, assessment, and circulation. Moreover, their differences were also apparent in how their internal perspective or worldview influenced their consequent view of worldly works. Thus, an amalgamation of the two techniques yielded an approach that prided itself as a midpoint connecting various strategies, tactics, and global outlooks (Driscoll et al., 2007). Hence, this particular study opted to integrate quantitative and qualitative methods to answer the research questions outlined. Further discourse on the mixed methods approach models was also presented, as such discussion was vital in justifying the best model suited for this work. The discourse was subsequently substantiated by the reasoning behind amalgamating both approaches in this study.

## 3.4 Mixed Methods Approach

The mixed-methods approach was defined as a process in which quantitative and qualitative data were integrated to enhance one's comprehension of an issue. Similarly, Creswell (2017) described this as "a procedure in one study to understand a problem in the collection, analysis, and 'mixing' of quantitative and qualitative data". It would serve as an alternative manner to utilize the two methods to supplement each other and inevitably resulting in an evaluation of higher quality and comprehension (Driscoll et al., 2007). In this study, the mixed methods approach was selected given the use of the methods singularly would be madequate to enhance the knowledge regarding the circumstances. The amalgamation of quantitative and qualitative techniques resulting in the mixed methods research design was tailored towards maximizing their respective benefits while minimizing their flaws concomitantly (Gelo et al., 2008). Previously, Creswell and Plano Clark (2017) have explained the benefits of the procedure, defining the strategy's internal force to counterbalance the drawbacks of using only a single approach. Quantitative research was usually trapped because the study was less knowledgeable about the meaning and work environment. Besides, the results generated from such studies can also rule out quotations from respondents, and there is no established or insufficient existence of study bias. In comparison, these were advantages of integrating qualitative studies, but they raised their limitations. Excessive researchers' influence in analyzing data was frequently stressed in qualitative studies, but this was not found to be a problem in quantitative research. Regardless, the use of various kinds of data collection processes in mixed methods research allowed more evidence to be presented in answering the research questions than one that opted for one methodology only. Such supplementary content obtained in extending the results and discourse would benefit researchers trying to propose all-inclusive research questions or implement various outlooks than they would be able to if they chose a singular method. Therefore, Creswell and Plano Clark (2017) claimed that a mixed-method research design was "practical in that the researcher was free to use all possible methods to address a research problem." The structure for the design of mixed methods is shown in Figure 3.1.



The strength behind mixed methods research was deeply rooted in its capacity that allowed researchers to pose different outlooks and examples (Gelo et al., 2008). This subsequently enabled them to pose research questions of higher intricacy and different varieties than one would expect to if merely using one methodology. Bryman (2006) found that such a method was primarily utilized to improve the results, triangulate the outcomes obtained, ensuring its completion, and adequately depict the findings.

O'Cathain et al. (2007) also extended the knowledge further by substantiating mixed methods research, emphasizing various benefits. Creswell and Plano Clark (2011) indicated the mixed methods methodology offered benefits that counterbalanced the quantitative and qualitative methods' flaws, respectively. It also elicited more justification when assessing a research problem and answering research questions unanswerable using the singular methods while closing the clashing gap between scholars advocating respective methodologies.

# 3.5 Mixed Methods Designs

Creswell and Plano Clark (2017) described five mixed approaches to data collection and data analysis in two broad categories. The first classification, named sequential designs, consists of three variants called Explanatory Design, Exploratory Design, and Embedded Design. Figure 3.2 explains these strategies visually.

9

71



Source: Creswell and Plano Clark (2017)

The all-inclusive methodologies assigned various uses, advantages, challenges, and procedures, respectively. In this study, the two-phase mixed-method Explanatory design was chosen, using qualitative data in the second phase to clarify further the initial quantitative results obtained during the first phase.

Such a technique can be used in the circumstances requiring qualitative data to describe significant or negligible results, outliers, or unanticipated findings (Creswell and Plano Clark, 2017). It will also be used for quantitative results obtained to guide sub-sample selection in the second step for further and comprehensive qualitative evaluation. Such a concept showed prominent due to its potential for inclusion in social science research. Creswell and Plano Clark (2017) identified the two design elements, the followup description and participant selection models. Both models were characterized by the same preliminary quantitative phase followed by the qualitative phase, but the relation between phases identified their differences. One model emphasized a thorough evaluation of findings, while the other highlighted the selected participants' resources. Of all mixed research design approaches, the Explanatory Design (Figure 3.3) was renowned for its directness, which later defined its advantages. One was the two-phase framework, which was explicitly and conveniently integrated, as the researcher usually undertook both approaches independently and only collected one form of data at a time. This allowed him to use the design alone, not needing a team. The design was also beneficial in multi-phase assessment and single mixed-method research and appealing in quantitative work due to a clear initial quantitative orientation.



descriptive research studies would be incorporated to explain a present occurrence (Salkind, 2009).

In contrast, Toomela (2008) believed that such variables were commonly vague, which consequently rendered the interpretation less significant. He also emphasized the negligence of ontology (reality) or epistemology (nature) of the variables in this methodology, underlining the fallacy behind interpreting a variable without knowing the encoded information was representative of which element. The method was also criticized due to its attribute of not assessing the occurrence the researcher was looking into, but only evaluate the magnitude of the problem (Chow et al., 2010). Such emphasis on the importance typically washed out the how's and why's behind the research, which was equally significant.

# 3.6 First Phase: The Quantitative Research

Upon choosing a quantitative methodology, preliminary data collection was undertaken by conducting hypothesis-testing research, whereby data was obtained and structures specifically for the work. Sekaran and Bougie (2016) outlined the hypothesis testing process that usually included delineating the existence of particular associations or developing group dissimilarities or interdependence of two or more factors in any circumstances. This allowed researchers to yield a refined understanding of the association between variables. Therefore, this study can be defined as a cross-sectional study as data collection was performed over a specific period to ensure it was tailored to the research objectives set. According to Zikmund (2003), it can be defined as a study that allowed multi-segmental population sampling at a single point in time.

### 3.7 Sampling Design

#### 3.7.1 Population Sampling

According to Cooper and Schindler (2010), a population can be defined as the collective number of attributes. Similarly, Creswell (2008) described the target population as a category of individuals possessing shared features that were identifiable and could be assessed. The unit analysis selected as the level of assessment was determined to be at the individual level. Malaysia Airports Holdings Berhad served as the setting for this study, thus rendering the target population to encompass all executive staff levels of the entity, including the head office and subsidiaries, to satisfactorily answer the problem statement scope of research (See Appendix I and 2). The inclusion was due to the status as the key workers with the knowledge, otherwise termed as K-workers (Lepak and Snell, 2002).

Individual human capital was typically deemed to be represented satisfactorily by classifying the formal education level obtained. Those who undertook longer schooling duration were associated with higher formal knowledge and executive proficiency. Additionally, they were also linked with a higher likelihood of developing refined skill-sets and abilities (Taylor et al., 2008). Meanwhile, Drucker (1999) referred to knowledge workers as employees who implemented fresh knowledge daily, and those who participated in or established strategic areas to materialize them into strategies for actual actions. Generally, they were equipped with impressive qualifications, exceptional education, and were highly informed regarding their work field compared to colleagues, including their manager. Such proficiency was also correlated with high rewards and honorarium.

In brief, "knowledge workers" could be defined as individuals offering supplementary quality values that were recruited due to their comprehensive knowledge regarding their careers. Furthermore, they were typically highly involved in strategic organizational areas and influential in developing an entity's competitive advantage (Giauque et al., 2010). Therefore, the author believed that these executives offered a significant potential to allocate quality input for the research (Islam et al., 2013).

## 3.7.2 Sampling Size

The sampling frame population was obtained from the HR Manpower database of the Human Resource Services Department, Malaysia Airports Holdings Berhad. The sampling frame was referred to as the list or quasi-list of attributes where a probability sample was derived from (Babbie, 2007). Up to October 2013, the target population encompassing Malaysia Airports Holdings Berhad's executives was recorded to a total of 979 individuals (See Appendix 3). Creswell (2008) previously stated that establishing the sample size of the target population was typically guided by the option of choosing the biggest number of samples to reduce the sampling error. Regardless, such size would inevitably be limited by various factors, such as the limited quantity of respondents that were appropriately accessible and the total size of the population.

Therefore, ensuring an adequately appropriate sample size selection was ascertained in this study utilized G\*Power 3 Statistical Power Analyses to compute the minimum sample size. Hair et al. (2017) recommended researchers use programs such as G\*Power to conduct power analyses specific to model setups. G\*Power offers easy to apply power analyses for a much larger variety of common statistical tests (Faul et al., 2007). The result is shown in the table below by entering the number of exogenous variables of three main constructs in the G\*Power. Based on Table 3.1 at the 95% confidence level ( $\alpha$ =0.05), the minimum required sample size determined from the

G\*Power is 119. This decision was taken to ensure a suitable estimation of the population attributes.





## 3.7.3 Sampling

Probability sampling typically consisted of the researcher to choose individuals who represented a particular population, which was the most intensive type of samp ling in quantitative research. This was attributed to their capacity to state the sample to characterize a population (Creswell, 2008). In this study, a simple random sampling design was utilized for the target population, as mentioned above, among Malaysia Airports Holdings Berhad's divisions. Therefore, any Malaysia Airports Holdings Berhad executives were represented accordingly, by the possibility for selection out of the population. Such a method was highlighted by Sekaran and Bougie (2016) as an unrestricted form of sampling design that offered the least bias and the most generalization potential. Krishna (2008) selection criterion was utilized as the underpinning standards, dictating that participatory eligibility in the survey required an employee to fulfil one of the conditions: serving an executive role (staff in administration or support teams were deemed ineligible). Executive in the context of Malaysia referred to individuals of high proficiency in their particular fields. According to Krishna (2008), such criterion was impactful as the best understanding regarding organizational setting was typically elicited from executives working in an organization.

# 3.8 Survey Research Design

The phrase survey research design could be described as a procedure in quantitative research. The researcher administered a survey to a sample or to the entire population of people to express the attitudes, opinions, behaviors or characteristics of a population' (Creswell, 2008). Typically, the cross-sectional survey design was the most commonly utilized type utilized in this work. The data collection processes were completed at a singular point in time, and the act of implementing a survey field study offered various benefits. They included the potential of attaining the maximum size of the representative population unit sampling that subsequently enhances the result's generalizability (Scandura and Williams, 2000). The phrase survey research design could be described as a procedure in quantitative research. The researcher administered a survey to a sample or to the entire population of people to describe the attitudes, opinions, behaviors or characteristics of a population' (Creswell, 2008). Typically, the cross-sectional survey design was the most commonly utilized type utilized in this work. The data collection processes were completed at a singular point in time, and the act of implementing a survey field study offered various benefits. They included the potential of attaining the maximum size of the representative population unit sampling that subsequently enhances the result's generalizability (Scandura and Williams, 2000).

## 3.8.1 Survey Questionnaire Development

Based on the literature review, this work opted to amalgamate the pre-existing measurements validated previously, which was established accordingly. The chosen measurements were then slightly transformed to accommodate better the research sample, a typical manner in establishing a survey instrument. This may be attributed to two primary benefits, explicitly confirming that the instruments were already evaluated for their reliability and validity. The use of pre-existing instruments allowed comparisons between the new findings versus those sourced from previous works (Kitchenham and Pfleeger, 2002). A high degree of care accompanying the instrument design, specifically in the wording utilized and question numbering. According to Frazer and Lawley (2000), a questionnaire was recommended to be easy, straightforward, and highly legible.

In this study, different validated scales were implemented to measure primary constructs, as revealed in the research model. Most were adapted per previous literature to suit the research sample, and were previously utilized or empirically tested. An initial total of 56 scale items was initially employed for construct measurement in this study, whereby each construct and its respective ordering and sources are listed accordingly in Table 3.2 below.

Constructs	Number of Items	of Source
Human Resource		
Management Practices	14	Pare and Tremblay (2007), and Kooji et al. (2010)
Servant Leadership	14	Van Dierendonck and Nujiten (2011)
Organizational Learning Capability	14	Chiva et al. (2007)
Organizational Commitment	14	Allen and Meyer (1990)

## Table 3.2: Overall Scaled Items Used

Items were chosen according to the primary criteria of three: 1) item reliability, if applicable, was evaluated to ascertain the items selected satisfied the minimally acceptable threshold (e.g. Cronbach's Alpha of 0.70 or greater); 2) construct validity (i.e. convergent and discriminant validity), if applicable, was evaluated to establish that the predicted items measured what it was presumed to measure; and 3) final item selection was guided by theoretical guidance and insight to ensure they best satisfied the domain of the specific construct described in the study.

# 3.8.2 Operationalization of the Constructs

A Likert Scale was primarily utilized in the sequences of the questionnaire disseminated in this work. Established by Likert (1932), it was a class of composite measures that aimed to enhance social research levels via standardized response classification to specify the comparative intensity of various items (Babbie, 2007).

Typically, its dimensions encompassed Strongly Agree, Agree, Neither Agree Nor Disagree, Disagree, and Strongly Disagree, as seen in this particular study.

## 3.9 Research Variables and Measurement

In this research, four variables or main constructs were collectively employed. Human resource management practices and servant leadership were the antecedents of organizational commitment, while organizational learning capability as the mediating variable.

This study utilized measurement items adapted from constructs validated prior in various business research, including the second-order construct. One benefit of using these pre-existing questions is that they would have been thoroughly tested at the time of first use. Thus, researchers may reasonably be sure that they are strong indicators of their interest concepts (Hyman et al., 2006). Information on the exact reliability of each question cannot always be easily accessed. Moreover, such a decision was also supplemented because the reliability and validity testing for validated measures already occurred and ascertained their qualities without further ado (Bryman and Bell, 2007).

The inclusion of a second-order construct, or known as a hierarchical component model (HCM) in this study is rationalized for various reasons. Apart from becoming increasingly popular in research. It is also more suitable than using one-dimensional or one-layer regular construction. This minimizes the number of associations in the model increases the parsimonious consistency of the path model. It believes that broader constructs are better predictors of parameters spanning several domains than enhances understanding of the path model (Hair et al., 2017). HCMs have two elements: the higher-order component (HOC) capturing the higher-order entity and the lower-order components (LOCs) representing the higher-order entity subconstructs. The relationships between (1) the HOC and the LOC, and (2) the constructions and their indicators are different for every HCM form (Hair et al., 2017).

The choice between reflective or formative models depends on the type of indicators or objects used to measure a structure (Ramayah et al., 2018). In this study, the structures used a reflective-reflective measurement model that indicates a (reflective) relationship between the HOCs and LOCs. Reflective indicators measure all primary-order constructs. Inclusion of reflective-reflective model or Mode A in this study, based on previous studies showing this type of model in different fields (Sarstedt et al., 2019). In general, the HOC of reflective-reflective represents an overall design close to the reflective model measuring that describes all underlying LOCs simultaneously (Hair et al., 2018). Chin (2010) indicated that assessing a higher-order model generally applies the same model assessment criteria for any PLS-SEM analysis. This model is evaluated as per the repeated indicator approach outlined by Wold (1982) in examining the constructs utilized in this study. Hair et al. (2017) indicated this approach is setups where the exogenous latent variable is measured reflectively in the repeated indicators approach, which means all indicators of the lower order constructs are assigned to establish the measurement model of the higher-order construct. Sarstedt et al. (2019) indicated that the repeated indicators approach is easy to apply and became prominent in previous higher-order constructs studies.

The structural model assessment is not a crucial issue since the lower–order components are not considered as being of the structural model (Sarstedt et al., 2019). Thus, the standard structural model assessment criteria apply. The following subsection would present further discourse regarding all variables (construct) utilized, and items (indicators) employed to measure them accordingly.

#### 3.9.1 Human Resource Management Practices

In this study, 14 item questions were employed to measure human resource management practices, encompassing various statements on the topic and supplied a 5point Likert scale from 1 (Strongly Disagree) to 5 (Strongly Agree). The practices included consisted of six influential and multi-dimensional elements selected according to previously conducted empirical studies and their inherent consistency and reliability, namely recognition, empowerment, competence development, performance management, fair rewards, staffing, and selection.

Based on the Pare and Tremblay (2007), and Kooij, Jansen, Dikkers, and De Lange (2010) scales served to measure the human resource management practices. Two reasons could rationalize it: 1) high involvement practices were utilized in this work to highlight employee participation in their jobs despite the presence of various human resource management practice scales from previous studies (Barney and Wright, 1998); and 2) the element was highly correlated with employee work-linked outlook and performance behaviour (Pare and Tremblay, 2007). As such, the sample items included: 'in my work unit, supervisors tangibly recognize my efforts in different ways', 'we are given great latitude for the organization of our work', and 'my salary is fair in comparison with what is offered for a similar job elsewhere'.

Besides, the high commitment human resource management practices scales from Kooij et al. (2010) were also utilized in this study despite exhaustive previous practices did not label them as such. Therefore, the human resource practices either high commitment or not were positions at generating a driven commitment to the organization (Wood and DeMenezes, 1998), thus qualifying them as high commitment practices only for this purpose. The sample items included 'the organization selects the right people for jobs', and 'performance appraisals are based on objective'. Table 3.3

revealed all 14 items utilized accordingly.

Table 3.3: The 14 Items Used to Measure Human Resource Management Practices

Scale Items	Item label	Number of
	4	Items
Recognition (Tremblay et al. 1998)		V
When I do good quality work, my colleagues regularly	REC1	3
show me their appreciation.		
When I do good quality work, my colleagues regularly	REC2	
show me their appreciation.		
In my work unit, supervisors tangibly recognize my	REC3	
efforts in different ways.		
		912
Empowerment (Tremblay et al. 1998)		V
We are given great latitude for the organization of our		N
work.	EPI	28
		4
In my work unit, we have considerable freedom	EP2	4
regarding the way we carry out our work.	2	O'
Competence Development (Tremblay et al. 1008)	601	
We can develop our skills to increase our chances of	COMI	3
heing promoted		5
Several professional development activities (e.g.	COM2	
coaching, training) are offered to us to improve our		
skills and knowledge.	1	
My organization provides me with the opportunity to	COM3	
achieve my career goals and advancement. (Kooij et	3	
al, 2010)	,	
Performance Management (Kooij et al, 2010)	PM1	2
Performance appraisals are based on the objective.		
Rewards are based on individual performance.	PM2	
Fair Rewards (Tremblay et al. 1998)	ED 1	2
My solary is fair in comparison with what is offered		3
for a similar job alcowhere	ΓΝΖ	
In my work unit, we consider that our compensation	FD3	
level adequately reflects our level of responsibility in	TKJ	
the organization		
the organization.		
Staffing and Selection (Kooii et al. 2010)		
The company effectively reflects situational changes	SS1	2
by re-organizing personnel to appropriate positions.		
The organization selects the right people for jobs.	SS2	
Total		14

### 3.9.2 Servant leadership

Various scholars established their servant leadership measurement, but this study adapted for the Servant Leadership Survey (SLS) by servant leadership literature elements, which allowed the psychometric establishment of both the 'servant' and 'leader' component. Therefore, the second-order construct survey encompassed servant leadership's essential facets, which was easily applicable and offered a psychometrically valid and reliable component (Van Dierendonck and Nuijten, 2011). Eight servant leadership indicators were framed in 14 item questions to measure servant leadership behaviour using a 5-point scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

They were acknowledged as the most influential indicators and satisfied the compelling facets of the construct while also addressing the flaws of previous works that may impact servant leadership on individuals and organizations (Van Dierendonck and Nuijten, 2011). The eight factors included: empowerment, accountability, standing back, humility, authenticity, courage, forgiveness, and stewardship. Some of the item samples had 'my superior encourages his/her staff to come up with new ideas', 'my superior takes risks and does what needs to be done in his/her view', and 'my superior has a long-term vision'. Therefore, Table 3.4 clearly outlined the 14 items utilized to measure the construct accordingly.

Empowerment My superior gives me the information I need to do my		
My superior gives me the information I need to do my		
work well.	EMP1	4
My superior encourages his/her staff to come up with new ideas	EMP2	Y
My superior gives me the authority to make decisions	EMP3	
My superior offers me abundant opportunities to learn new skills.	EMP4	
Standing Back		
My superior is not chasing recognition or rewards for the things he/she does for others.	SB1	315
Accountability		T
I am held accountable for my performance by my	ACC1	
manager.	9	2Vr
Forgiveness	19	4
My superior keep criticizing people for the mistakes	FGV1	$O^2$
they have made in their work.	1 19	<u> </u>
My superior maintains a hard attitude towards people who have offended him/her at work.	FGV2	b.
Courage	4 4	
My superior takes risks and does what needs to be	COHI	1
done in his/her view.		1
Authenticity		
My superior shows his/her true feelings to his/her staff.	AUT1	1
Hummity		2
My superior admits his/her mistakes to his/her	HUM2	5
superior.	1101112	
If people express criticism, my superior tries to learn	HUM3	
from it.	-	
Stewardship		
My superior has a long-term vision.	STE1	1
Total		14

# Table 3.4: The 14 Items Used to Measure Servant Leadership

### 3.9.3 Organizational Learning Capability

Scholars have researched organizational learning processes to create a given and characteristic measurement dimension (See Goh and Richard, 1997; Jerez-Go'mez et al., 2005; Bhatnagar, 2006). Jerez-Go'mez et al. (2005) consider organizational learning to be a latent multidimensional construct since its maximum sense lies below the various dimensions of its make-up. Therefore, a company should demonstrate a high degree of learning in each dimension defined to claim that its learning capability is vital. Dimensions of Jerez-Go'mez et al. (2005), called managerial participation, system perspective, transparency, experimentation, information transfer, and incorporation. Based on Jerez-Go'mez et al. (2005), Chiva et al. (2007), establishing an organizational learning scale was characterized by two critical outlooks. Firstly, pre-existing learning enablers within the organization were searched for, which aimed to characterize the element's facilitators and measured the entity's capacity to learn or generate a learning environment. Accordingly, it could be either formal or informal circumstances achieved by knowledge sharing, acquisition, and usage. Secondly, the outlook anticipated learning outcomes in the organization, which aimed to establish organization learning attempts.

This study opted for the exhaustive organizational learning capability measurement scale by Chiva et al. (2007) that satisfied the second perspective. Fourteen items encompassing five dimensions were subsequently utilized as the primary facets of organizational learning, derived from an in-depth review of both points of view. They included: experimentation, risk-taking, interaction with the external environment, dialogue, and participative decision-making. These elements served as a fundamental contribution towards the body of literature as substantiated by their comprehensiveness and statistical validation (Chiva et al., 2007). Due to this work determining organizational learning as an organizational capability, it was measured as a secondorder construct instead of the previously conducted works that were also conducted as such (Barba Aragón et al., 2014; Santos-Vijande et al., 2012).

Moreover, despite the measurement scale being fashioned to be answered by individuals of an organization, its findings would result in the organizational level's conclusions. Even though the questionnaires were answered by respondents who were employees of a singular industry to limit the industrial impact across organizations, the instrument remained fashioned notwithstanding the participant's, sector's, or country's attributes. Examples of the items included: 'it is part of the work of all staff to collect, bring back, and report information about what is going on outside the company', and 'initiative often receives a favorable response here, so people feel encouraged to generate new ideas'. In Table 3.5 below, all 14 items utilized to measure organizational learning capability are listed accordingly, as seen below.

Table 3.5: 14 Items Used to Mea	usure Organizationa	Learning Capability
---------------------------------	---------------------	---------------------

Scale Items	Item Label	Number
	Item Laber	of Items
Experimentation		
People here receive support when presenting new ideas.	EXP1	2
Initiative often receives a favorable response here, so people	EXP2	
feel encouraged to generate new ideas.		
Risk Taking		
People are encouraged to take risks in this organization.	RIS1	2
People here often venture into unknown territory.	RIS2	
Interaction with the External Environment		
It is part of the work of all staff to collect, bring back, and	IEE1	3
report information about what is going on outside the		
company.		
There are systems and procedures for receiving, collating and	IEE2	
sharing information from outside the company.		
People are encouraged to interact with the environment:	IEE3	
competitors, customers, technological institutes, universities,		
suppliers, etc.		

(Continued...)

### (Continued...)

Dialogue	4
Employees are encouraged to communicate.	DIA1
There is free and open communication within my work group.	DIA2
Managers facilitate communication.	DIA3
Cross-functional teamwork is a common practice here.	DIA4
Participative Decision Making	
Managers in this organization frequently involve employees in important decisions.	PDM1 3
Policies are significantly influenced by the view of employees.	PDM2
People feel involved in main company decisions.	PDM3
Total	14
	Sist
3.9.4 Organizational Commitment	7 ~

The questionnaire on organizational commitment was measured based on the established Allen and Meyer (1990) multidimensional measurement organizational commitment. Based on the model, however, two components only were incorporated in this study, specifically affective and continuous commitment respectively, based on Cohen's (2007) two-dimensional commitment method to prevent overlapping with the predictive intention on organizational commitment.

A total of 14 items consisting statement of two components of affective commitment and continuous commitment as the dimensions to measure organizational commitment. Sample of affective commitment items is 'I am very happy being a member of this organization, and 'I feel as if this organization's problems are my own. The continuance commitment items' sample is 'I worry about the loss of investments I have made in this organization', and 'I am dedicated to this organization because I fear what I have to lose in it'. Table 3.6 indicates the 14 items used to measure organizational commitment.

Scale Items	Item Label	Number
		of Items
Affective Commitment		-
I am very happy being a member of this organization.	AC1 🦱	8
I enjoy discussing about my organization with people outside	AC2	_
it.		
I really feel as if this organization's problems are my own.	AC3	
I think that I could easily become as attached to another	AC4	
organization as I am to this one.		
I do not feel like 'part of the family' at my organization.	AC5	
I do not feel 'emotionally attached' to this organization.	AC6	
This organization has a great deal of personal meaning for me.	AC/	
I do not feel a 'strong' sense of belonging to my organization.		
	AC8	
		15
Continuance Commitment		
I worry about the loss of investments I have made in this	CCI	× 6
organization.		7
If I weren't a member of this organization, I would be sad	102 J	
because my life would be disrupted.	CC2 /	
i ani ioyal to this organization because i have invested a for in		
It, emotionally, socially, and economically.	CCA	
1 often feel anxious about what I have to lose with this	CC4	
organization.	CC5	
sometimes I worry about what might happen if something was	Ses	
I am dedicated to this organization because I fear what I have	CCG	
to lose in it		
Total		1/
		14
Therefore a start his is the start of the start is still	l' 1 (	
Inerefore, an overall initial total of 56 items is uti	lized to meas	ure this study
and be validated before the pilot study.		
51.2.5		

# Table 3.6: The 14 Items Used to Measure Organizational Commitment

# 3.10 Demographic Variables

Demographic variables of interest include gender, race, age, highest education, current position, division/subsidiary, and the number of years attaching to the existing organization. The demographic information was used to determine if significant individual demographic differences existed between the respondents.

### 3.11 Content Validity

The questionnaire is defined as 'a a reformulated written set of questions to which respondents usually record their answers within instead closely defined alternatives' (Sekaran and Bougie, 2016). This study used questionnaires as an instrument for collecting data. This analysis must confirm whether all elements calculate the content intended to be measured using the current tool (Creswell, 2014). The instrument has been emailed and introduced to several experts to identify possible issues along with an expert review form.

These included academics experts from Universiti Kebangsaan Malaysia (UKM), Universiti Teknologi Malaysia (UTM), and Faculty of Management and Muamalah, Kolej Universiti Islam Antarabangsa Selangor (KUIS) in the field of Human Resource Management and Research Methodology. This was done to eliminate any uncertainty or ambiguity in the questionnaire. This approach may improve the questionnaire's material's validity and reliability (Frazer and Lawley, 2000). The questionnaire comprises five sections. The first four sections consist of 14 items relating to the constructs, while the last part consists of demographic questions. It was anticipated that each respondent would require about 20 minutes in completing the questionnaire. Following is a detailed discussion of each section.

Section A - This section includes 14 questions asking respondents to evaluate their perception of human resource management practices within the organization. These questions reflect the six dimensions of human resource management practices.

Section B - This section includes 14 questions asking respondents to evaluate their perception of servant leadership behavior among their immediate superior and management in the organization. These questions reflect the eight dimensions of servant leadership. Section C - This section includes 14 questions asking respondents to evaluate their perception of organizational learning capability. These questions reflect the five dimensions of organizational learning capability.

Section D - This section includes 14 questions asking respondents to evaluate their perception of organizational commitment. These questions reflect the two components of organizational commitment.

Section E - This section contains seven questions asking respondents about their gender, race, age, highest education, current position, division/subsidiary, and the number of years attaching to the existing organization. A covering letter containing the study's purpose, highlighting the importance of their participation in this research, the assurance of confidentiality, and researcher contact information are included on the instrument's front page. A covering letter is essential as it is the only opportunity to anticipate and answer respondents' questions, improving the response rate (Dillman, 2007).

After getting the experts feedback, particular views from the experts were addressed (See Appendix 4). These include the omission of certain sub-constructs, number of items, and terms. Specifically, the most important comments were the omission of sub-constructs that have one measurement item. These include five subconstructs of servant leadership, i.e. Standing Back, Accountability, Courage, Authenticity, and Stewardship. According to Hayduk (2012), using a single indicator is useful but using a few best indicators is often sufficient. Therefore this study accepted the suggested omission of such sub-constructs.

Overall, the measurement items commented as good, simple, adequate, and understandable. However, there is a strong suggestion to omit five sub-constructs of the servant leadership construct since it utilized a single item or indicator only. In

supporting this, Hair et al. (2017) concluded that choosing single-item measures in most empirical settings is risky for validity considerations. For example, when the data is divided into groups, fewer degrees of freedom are available when one-item measures are used since scores from only one attribute can be allocated to groups. Single-item measures often prohibit eliminating measurement errors (as with multiple items), and generally reduce their reliability. Therefore, all the total measurement items of each construct remain unchanged except the Servant Leadership construct which shown in

Table 3.7 as follow:

Table 3.7: The 9 Items Used to Measure Servant Leadership			
Scale Items	Item label	Number of	
	a	Items	
Empowerment			
My superior gives me the information I need to do my work well.	EMP1	4	
My superior encourages his/her staff to come up with	EMP2		
My superior gives me the authority to take decisions	FMP3		
which make work easier for me			
My superior offers me abundant opportunities	FMP4		
to learn new skills			
	2		
Forgiveness	5		
My superior keeps criticizing people for the mistakes	FG1	2	
they have made in their work.			
My superior maintains a hard attitude towards people	FG2		
who have offended him/her at work. 🍸 🛛 📈			
Humility			
My superior learns from criticism.	HUM1	3	
My superior admit his/her mistakes to his/her superior.	HUM2		
If people express criticism, my superior tries to learn	HUM3		
from it.			
2			

Therefore, there are a finalized overall total of 51 items for measurement in the

pilot study.

### 3.12 Pilot study

A pilot study was conducted to validate the items' reliability and internal consistency and understand the respondents to the questionnaire. According to Cooper and Schindler (2008), a pilot study has saved countless survey studies from a disaster using the respondents' suggestion to identify and change confusing, awkward, or offensive questions and techniques. Therefore it is unacceptable to reuse the pilot research sample as the vital study sample (Memon et al., 2017). There are several guidelines for assessing a pilot study sample size. Cooper and Schindler (2010), for example, proposed a survey of 25-100 individuals.

According to the suggestion from Memon et al. (2017), 50 respondents were used to test the administered questionnaire removed from the main study in this pilot study. This number comes from the Central Limit Theorem, which makes a distributional sample size of 30 or more to ensure that the mean of any samples from the target population is approximately equal to that of the population (Memon et al., 2017).

Data was collected and self-administered by assigning a person-in-charge at Malaysia Airports Holdings Berhad, and it was gathered manually. Pilot respondents were randomly selected among the executive staff to participate. The criterion of selections for the pilot respondents was similar to the actual research data respondents. Following this, the manual addition of the raw data into a data file was subsequently undertaken by utilizing the Statistical Package for the Social Sciences (SPSS) version 23.0 to generate an analysis of the internal consistency reliability of data obtained. A total of 50 questionnaires were distributed (See Appendix 5), and from the amount, 40 (80%) of questionnaires were returned. Thus, the minimum requirement of sample size for the pilot study was met accordingly The alpha coefficient is historically determined to verify the measures' internal accuracy (Memon et al., 2017). Cronbach's Alpha ( $\alpha$ ) value was used in this study because it is widely used by researchers and can be regarded as an adequate index (Sekaran and Bougie, 2016). In general, the lower limit for Cronbach alpha acceptance is 0.60 to 0.70 (Hair et al., 2017). The accurate measurement of the four key structures in this study ranges from 0.831 to 0.909 (See Appendix 6); all within the appropriate range as defined in the literature and shown in Table 3.8.

# Table 3.8: Reliability Test for Pilot Study

Construct	Cronbach's Alpha (α)
Human Resource Management Practices	0.843
Servant Leadership	0.856
Organizational Learning Capability	0.909
Organizational Commitment	0.831

## 3.13 Data Collection

After the pilot study was conducted, the validated self-administered paper questionnaires were distributed to the target respondents in Malaysia Airports Holdings Berhad (See Appendix 7). A meeting with all representatives from nine divisions/or subsidiaries of Malaysia Airports Holdings Berhad appointed and coordinated by the Performance Management section; Human Resource Services Department was conducted to brief them on the research details and explain the process of collecting data to maximize the overall probability of response (See Appendix 8). Each representative was distributed with the number of set questionnaires according to the total number of respondents of each division, respectively. A few division representatives had not to turn up for the meeting, and a 'drop-off and collect' method was applied. This method involves the researcher travelling to the division's location and meets up with the appointed representatives.

Ample time and timeline were provided to all designated members to hand over survey questionnaires to respondents to complete the questionnaire at their own time and convenience. This was to ensure an individual's availability to answer questions, as the questionnaires were hand-delivered by a representative who works in the same company as the respondents. This approach has stimulated respondents' interest in completing the questionnaire by contact between the representative and the respondents (Hair et al., 2007). All completed questionnaires were submitted to the Performance Management section, Human Resource Service Department by the representatives. In this study, personnel from Human Resource Services Department, Malaysia Airports Holdings Berhad acted as the gatekeeper to help the researcher assist research procedures, locate relevant parties, and provide access to the organization. The gatekeeper could be referred to as the person with either an official or unofficial authority at the site, allowing entry to the site, assisting researchers in locating individuals and distinguishing the evaluation location (Hammersley and Atkinson, 2007).

# 3.14 Data Analysis

The first phase of the research analysis was undertaken by utilizing the Statistical Package for the Social Sciences (SPSS) version 23.0 to generate an analysis of the descriptive data obtained. The software was used to accomplish various aims, such as data cleaning (i.e. coding, missing data, straight-lining, outliers, and data distribution) and making several computations for further information regarding the data (i.e. frequencies, means, standard deviations), and conducting common method variance test. Meanwhile, the second phase utilized a Partial Least Square Structural Equation Modelling (PLS-SEM) approach to conduct hypotheses testing as outlined previously. The process was expedited by the robust statistical methodology, which was known for its user-friendliness in conducting second-generation multivariate statistical analysis. It was typically established to evaluate inter-correlations present between several variables in a model concomitantly.

The process of utilizing SEM allowed researchers two options, whether to opt for covariance-based software (CB-SEM) like AMOS, LISREL, and EQS, or variancebased software (VB-SEM) like PLS-Graph and Smart PLS (Chin and Newsted, 1999). The final decision was typically driven by research attributes, where CB-SEM is primarily used to confirm or refute theories. In contrast, PLS-SEM is used principally to establish theories for exploratory research or predictive purposes in a study. Hair et al. (2017) addressed the integration neglect estimation of CB-SEM, which was the main empirical study goal. Therefore, this weakness can be resolved by using PLS-SEM, which was designed to override dependent latent variable prediction and optimize the explained variance of dependent variables (Ramayah et al., 2018).

# 3.14.1 Partial Least Square Structural Equation Modelling (PLS-SEM)

PLS-SEM's popularity was partly rooted in its ease of use, which was advantageous compared to other statistical methods like regression and CB-SEM, subject to frequently encountered circumstances (Goodhue et al., 2012). It was more attractive in the case of research objectives that emphasized predicting and elucidating the variance of principal target constructs (e.g. strategic success of firms) using various explanatory constructs, or in comparatively small sample size, or non-normal data collected (Hair et al., 2012). Nevertheless, Urbach and Ahleman (2010) advocated for PLS-SEM due to its capacity for implementation in intricate structural equation models with many constructs, and its capability to manage reflective and formative model or constructs alike. Instead of underlining the competition, the use of PLS could be observed as complementary to CB-SEM in various research attempts, highlighting its potential and suitability in the specific context of empirical research and objectives. In the line of PLS-SEM was gaining credibility as a methodology in various business fields (Hair et al., 2017), this work implemented SmartPLS version 3.0 software formulated by Ringle et al. (2005) to conduct the quantitative data analysis. The systematic procedure for applying PLS-SEM in data analysis is shown in Figure 3.4. Subsequently, the next sub-section explained the measurement model's assessment, followed by assessing the structural model.



### 3.14.2 Measurement Model

The formulation of a reflective measurement model was rooted in measuring how the variables observed were reliant upon the unobserved or latent variables (LV), respectively (Hair et al., 2006). The measurement models reflect the relationship between the constructs and their respective indicator variables. Hypothesis tests for structural relations between structures would only be as accurate or correct as measurement models describe how these structures are measured (Hair et al., 2017).

In assessing the reflective measurement model, three main assessment criteria are conducted: internal consistency reliability, convergent validity, and discriminant validity (Ramayah et al., 2018). However, Sarstedt et al. (2019) argued that the assessment of discriminant validity in previous studies on higher-order constructs has not (or only incompletely) been covered. Thus, in this study, the relevant statistics for assessing the higher-order construct's reliability and validity will be calculated manually.

## 3.14.3 Indicator Reliability (Outer Loadings)

Indicator reliability was assessed via the extent to which a variable or a set of variables was consistent with the item it wanted to measure (Urbach and Ahlemann, 2010). The reliability construct was typically not reliant on other constructs and was measured separately. Chin (1998) stated that the indicator loadings were significant at the level of 0.05, whereas the loading should be greater than 0.7. This was explained by a latent variable that was deemed to be capable of explaining at least 50 percent of its indicator's variance in case of a loading value of 0.708 (Hair et al., 2019). Regardless, the loading value of 0.5 was also acceptable, according to some scholars.

Moreover, resampling methods like bootstrapping could be utilized to test the significance of the indicator loadings. Similarly, Henseler et al. (2009) recommended that scholars be wary of eliminating any indicator by factoring in PLS-SEM's attributes for consistency. An indicator should only be dismissed if its reliability is low and its elimination resulted in a remarkable composite reliability increment.

# **3.14.4 Internal Consistency**

A measurement item's internal consistency was typically assessed using Cronbach's alpha, whereby constructs yielding a high value indicated that their respective items possessed a similar range and meaning (Cronbach, 1971). It served as an estimation for reliability according to indicator inter-correlations, whereas PLS-SEM utilized composite reliability to measure internal consistency (Chin, 1998). This was explained because despite Cronbach's alpha and composite reliability, both measuring identical elements, composite reliability included that indicators may have dissimilar loadings. In contrast, Cronbach's alpha was linked with a gross underestimation of internal consistency, as it assumed all indicators are equally weighted, and measures were not presumed to be equal (Werts et al., 1974). Hair et al. (2017) suggested internal consistency reliability, i.e. composite reliability should exceed 0.70 (but in exploratory testing, 0.60 to 0.70, is considered appropriate.

Using the indicator loadings and the correlation between the constructs as feedback, results are determined manually to determine the higher-order construct's reliability (Sarstedt et al., 2019). The method for calculating composite reliability:

$$\rho_{C} = \frac{\left(\sum_{i=1}^{M} l_{i}\right)^{2}}{\left(\sum_{i=1}^{M} l_{i}\right)^{2} + \sum_{i=1}^{M} var(e_{i})}$$

The composite reliability is defined as where  $e_i$  is the measurement error of the lower-order component *i*, and  $var(e_i)$  denotes the variance of the measurement error, which is defined as  $1 - l^2_i$ . Entering the two loading values yields the following:  $\rho C = (0.897 + 0.927) 2 (0.897 + 0.927) 2 + 1 - 0.8972 + (1 - 0.9272) = 3.327 3.327 + 0.195 + 0.141 = 0.908.$ 

# 3.14.5 Convergent Validity

Convergent validity referred to the degree to which unique items could be translated to a construct that converged in contrast to those that measure dissimilar constructs (Urbach and Ahlemann, 2010). PLS-SEM could be utilized to assess the element using the Outer Loadings for indicator reliability and value of Average Variance Extracted (AVE), a measure established by Fornell and Larcker (1981).

The indicator's outer loadings should be higher than 0.708. However, the outer loadings between 0.40 and 0.708 should be considered for removal only if the deletion leads to an increase in composite reliability and AVE above the suggested threshold value (Hair et al., 2017). Ramayah et al. (2018) indicated that loadings less than 0.7, 0.6, 05 are adequate if other items have high scores of loadings to complement AVE and CR. The AVE disclosed the number of variances derived by a construct from its indicator parallel to the variance amount due to measurement inaccuracies. Hair et al. (2017) emphasized that adequate convergent validity was obtained if the AVE value is 0.5 at least. Using the indicator loadings and the correlation between the constructs as data, the result is manually determined for the higher-order construct's validity (Sarstedt et al., 2019). The AVE calculation formula (the mean of the square loadings of the higher-order component) is as follows:

(1) where  $l_i$  represents the loading of the lower-order component, *i* of a specific higher-order construct measured with M lower-order components (*i* = 1,...,M). For this example, the AVE is (0.8972 + 0.9272)/2 = 0.832, clearly above the 0.5 threshold, suggesting convergent validity for REPU (Sarstedt et al., 2017).

 $AVE = \frac{\left(\sum_{i=1}^{M} i\right)}{\sum_{i=1}^{M} i}$ 

# 14.6 Discriminant Validity

Discriminant validity was typically employed to distinguish measures of one construct to another, testing whether an item was not measuring something else

accidentally unlike convergent validity (Urbach and Ahlemann, 2010). In PLS-SEM, the Fornell-Larcker's criterion (Fornell and Larcker, 1981), cross-loadings, and Heterotrait-Monotrait (HTMT) ratio of correlations were utilized which necessitated latent variables to disseminate more variance to its allocated indicators compared to other latent variables.

However, Henseler et al. (2015) criticized the performance of cross-loadings and the Fornell-Larcker criterion for discriminant validity assessment and found that neither approach reliably detects discriminant validity issues. Henseler et al. (2015) suggest assessing the Heterotrait-Monotrait ratio of the correlations, which can estimate the true correlation between two constructs if they were correctly measured. Thus this study employed the HTMT approach and relied on a procedure called bootstrapping to derive a distribution of the HTMT statistic (Hair et al., 2017).

### 3.15 Structural Model

The path model is the diagram that connects theory and logic variables/constructs to show the hypotheses that the structural model is tested (also referred to as the internal PLS-SEM model) representing the connections between latent variables (Hair et al., 2017).

Structural model validation was useful in systematically assessing the structure model's hypotheses to be supported by the data or not (Urbach and Ahlemann, 2010). The model could only be analyzed after a successful measurement model validation. In SEM-PLS specifically, the structural model assessment could be undertaken using path coefficient, coefficient of determination (R<sup>2</sup>), effect size (F<sup>2</sup>), and Q<sup>2</sup>.

### 3.15.1 Lateral Collinearity Issue

In the initial stage of assessing the structural model, it is crucial to address the lateral collinearity issue. This typically occurs when two hypothesized variables causally related measure the same construct (Ramayah et al., 2018). Thus, to address this issue, the assessment of VIF values need to be applied and to be specific, a VIF value of 5 or higher indicates a potential collinearity problem. (Ramayah et al., 2018).

# 3.15.2 Significance and Relevance of Structural Model Relationships

The validation of the presented hypotheses and structural model required evaluating the two latent variables' path coefficient. Therefore, the SmartPLS algorithm output was utilized to examine the correlations between the exogenous and endogenous variables. However, testing the significance level and t-statistics for all of the paths called for the bootstrapping test to be conducted using 500 subsamples. Subsequently, the path coefficients and t-statistics yielded all inferred paths evaluation outcomes allowed the proposed hypotheses to be accepted or rejected accordingly.

# 3.15.3 Coefficient of Determination (R<sup>2</sup>)

PLS structural model assessment was first done by evaluating each endogenous LV's coefficient of determination (R<sup>2</sup>). It measures the model's predictive accuracy and the combined effort of exogenous variables on endogenous variables (Ramayah et al., 2018). The value should be adequately high to allow the model to achieve a minimum explanatory power level (Urbach and Ahleman, 2010). R<sup>2</sup> assessed the correlation between an LV's explained variance to its total variance, Falk and Miller (1992) advocated for its values to be equal or greater than 0.10. Such value would be accepted as sufficient in variance explaining for a specific endogenous construct. Meanwhile,

Cohen (1988) accepted  $R^2$  value of approximately 0.26 to be substantial, 0.13 as moderate, and 0.02 or less as a weak acceptance level.

## 3.15.4 Effect Size (f<sup>2</sup>)

Besides, to test the  $R^2$  values of all endogenous constructs, a shift in the  $R^2$  value when a particular predictor construct is excluded from the model may be used to determine whether the omitted construct has a material effect on the endogenous constructs (Sarstedt et al., 2017). In particular, it tests how strongly one exogenous construct contributes to the interpretation from a specific endogenous construct in the  $R^2$  term (Ramayah et al., 2018). This measure is referred to as the f<sup>2</sup> effect size. As a guideline, f<sup>2</sup> values of 0.02, 0.15, and 0.35, respectively, represent small, medium, and substantial effects size (Cohen, 1988) of an exogenous latent variable. Effect size values of less than 0.02 indicate that there is no effect.

# 3.15.5 Predictive Relevance (Q<sup>2</sup>)

Another way to test the model's predictive accuracy is the Q<sup>2</sup> value (Hair et al., 2019). Stone and Geisser Q<sup>2</sup> (Geisser, 1974; Stone, 1974) are also used to test predictive relevance (Ramayah et al., 2018). The Q<sup>2</sup> value builds on the blindfolding process, omitting single points in the data matrix, imputing the omitted elements, and estimating the model parameters (Sarstedt et al., 2017). Blindfolding is a resampling technique that systematically deletes and predicts each indicator data point in an endogenous construct's reflective measuring model (Ramayah et al., 2018). The smaller the difference between the predicted and the original values, the greater the model's predictive accuracy and significance (Sarstedt et al., 2017). As a relative measure of

predictive relevance, Q<sup>2</sup> values of 0.02, 0.15, and 0.35 suggest that an exogenous construct has small, medium, or high predictive relevance for a particular endogenous construct, respectively (Sarstedt et al., 2017).

Table 3.9 briefly summarizes the validity guideline employed to evaluate a reflective measurement model and structural model accordingly.

Table 3.9: Summary of Validity Guidelines to Assess Measur	rement Model and
Structural Model	Sist

No.	Validity Type	Criterion	Guidelines
	Measurement Model:	Y	The second
1.	Internal Consistency	Composite	Minimum 0.70 (or 0.6 in
	Reliability	Reliability	exploratory research
2.	Indicator Reliability	Outer Loadings	Minimum 0.708 (or 0.6 in
	-		exploratory research
3.	Convergent Validity	AVE	AVE > 0.50
4.	Discriminant Validity	Heterotrait-Monotrait	HTMT < 0.90
		(HTMT) ratio	5
		34	8
	Structural Model:	R <sup>2</sup> value	R <sup>2</sup> values of 0.75, 0.50, and 0.25
5.	Coefficient of		are considered substantial,
	Determination 🔊 V	3.5	moderate, and weak. R <sup>2</sup> values
		110	of 0.90 and higher are typically
		3 84	indicative of overfitting.
		C.	
6.	Effect Size	f <sup>2</sup> value	f <sup>2</sup> values of 0.35, 0.15, and 0.02
			are considered substantial,
		SI,C	medium, and small effect sizes.
	51.1	8.5	
7.	Predictive Relevance	$Q^2$ value	Q <sup>2</sup> values larger than zero are
	X	N	meaningful. Values higher than
		-	0, 0.25, and 0.50 depict small,
		X	medium, and large predictive
		2°	accuracy of the PLS path model
		Ϋ́.	
		Source: Hair et al. (2	2019)

### **3.15.6 Mediation Analysis**

Baron and Kenny's (1986) causal procedure method has been commonly used to assess the social science mediation effect (Ramayah et al., 2018). However, with several shortcomings and limitations of the method, current direct in mediation analysis is based on Preacher and Hayes (2004, 2008), emphasising indirect effect instead of direct effect. Hair et al. (2017) recommended following the Preacher and Hayes (2004, 2008) method in bootstrap the indirect effect of sampling distribution which works for a simple single mediator and is perfectly suited for the PLS-SEM approach.

Mediation occurs when interference with two other similar constructs happens between a third entity called a variable mediator. More specifically, a change in the exogenous construct results in a shift in the mediator variable that changes the endogenous construct in turn. Analyzing the mediator variables strength's interaction with the other constructs enables the processes underlying the cause-effect relationship between an exogenous and an endogenous construct to be substantiated (Hair et al., 2017). In this analysis, using the segmentation method in mediation testing, only one mediator variable is used in a path model for direct and indirect effects. Next, the following sections discussed the qualitative research method utilized in this study to support the quantitative approach.

# 3.16 Second Phase: The Qualitative research

There have been many debates on the term that defines qualitative research in previous years. However, according to Merriam (2009), qualitative research definition by Van Maanen (1979) is the most concise through the recent several years, i.e., "An array of interpretive techniques which seek to describe, decode, translate, and otherwise come to terms with the meaning, not the frequency, of certain more or less naturally occurring phenomena in the social world. To operate in a qualitative model is to trade in linguistic symbols and, by so doing, attempt to reduce the distance between the indicated and the indicator, between theory and data, context and action." (Van Maanen, 1979).

Qualitative research is an inductive process to the extent that the research design permits the academic scholars to gather data to build a concept, hypotheses, theories rather than deductively testing hypotheses as to the quantitative research (Merriam, 2009). It perceives the occurrence of understudies to be part of a system. It is not favoured to be minimized to a small number of variables with a clear cause-and-effect relationship, discernment, and assessment of life experiences, social life settings, and behaviours, through researchers' engagement with the people (Parker, 2012). Qualitative research permits the contents being studied to impart much 'richer' feedback and responses to the researcher's interview questions. They may provide constructive judgments which might have been an absence in the quantitative method. The qualitative approach grants a study to comprehend the circumstances within which actions and decision-making processes occur (Myers, 2009). This study employs qualitative methods because it can provide a holistic perspective on the organization and interact with its institutional, social, and behavioural contact. Therefore, mixedmethod was chosen in this study to provide a better understanding of the integration of the quantitative and qualitative methods than would be obtained by using only one method.

### 3.17 Sampling Design

### 3.17.1 Purposeful Sampling

Purposeful or purposive sampling was implemented in this study by choosing individuals and sites to learn and comprehend the critical occurrence. Creswell (2008) indicated that it allowed establishing an in-depth comprehension that may yield substantial information and enhance one's understanding of the circumstance. According to Abdullah (2019), there are ten types of purposeful sampling in qualitative research, and one of them is snowball sampling. Therefore, this study utilized snowball sampling as the sampling strategy due to the research aim and qualitative datausage to enhance the quantitative data outcomes. This particular sampling was also termed a chain or network sampling, which was the most typical type of purposeful sampling and allowed researchers to meet the study participation criteria with ease (Merriam, 2009).

Creswell (2008) described the sampling as a purposeful sampling that generally occurred after a study commenced. The respondents were asked to advocate for other individuals for the study. Specific research circumstances may render a researcher unknowing of the best individuals to be sought after due to unfamiliarity with an organization and its intricacy. Therefore, showball sampling utilized the initial respondents in distinguishing other informants in the target population, which was a continuous process until one achieved the sample size needed. In this study, the process was first initiated using the person-in-charge, specifically the Human Resource Services Department personnel, who then recommended the individuals best suited to act as the informants (See Appendix 9). Based on Sargeant's (2012) selection of participants' essential elements, informants' criteria can best and most broadly inform the questions to ensure representation of crucial aspects of the research questions in understanding the phenomenon (Sargeant, 2012).

### 3.17.2 Sampling Size

The amount of individual and site sampling typically differed between qualitative studies due to the organizational intricacy, detailed outlook required, timing of the study, and the qualitative method utilized. According to Merriam (2009), the number of people to be interviewed, sites to be visited, or documents to be perused were all collectively established according to the research questions, data collection processes, and resources available for the study. Creswell (2008) stated that many cases might not be required as it hindered one's wielding of the size and led to shallow outlooks. Therefore, this study utilized a case study and recruited four management staff levels from different departments as the informants for this research design. They were approached via email that requested consent for an interview at their convenience. Two managers and two senior managerial ranks of different sections were approached, with their information outlined in Table 3.10 as follows:

No.PersonInformant<br/>Code1P1Senior Manager2P2Senior Manager3P3Manager4P4Manager

# Table 3.10: The Details of the Interview Informants

# 3.17.3 Interview Method

According to DeMarrais (2004), an interview could be described as "a process in which a researcher and participant engaged in a conversation focused on questions related to a research study. Hunter's (2012) methodology was the basis of the interview procedure. An interview guide referred to here as a "protocol", gives direction and offers some continuity in performing a series of interviews. But also provided for the versatility of the study subject within their respective interviews (See Appendix 10). The technique is used when collecting qualitative data in one-on-one interviews (Hunter, 2012). In the interview, the research informants unbiasedly invited them to explain their impressions of their knowledge of the analysis topic. In the context of the research question, the research informants could share their thoughts (Hunter, 2012).

Data was gathered by incorporating semi-structured and face-to-face interviews, which necessitated the research to converse with the respondent directly. Interviews were implemented due to their ease and benefits when facing intricate or matters of a susceptible nature. They may differ from a highly structured manner to an unstructured design, whereby unstructured interviews typically occurred casually and flexibly, whereas structured interviews were constant and regulated. This study opted for a semistructured interview design instead.

By using the semi-structured interviews, the researcher is guided by a list of questions, have an overall structure and direction, but it allows the flexibility to exercise own initiative in following up an interviewee's answer to a question. This less structured approach may offer a balance between focus and flexibility between focus and openended interviews. This enables researchers to respond to the situation by revealing insightful information, improving the results (Abdullah, 2019).

Interviews in qualitative research are usually wide-ranging, probing issues in detail. They seldom involve asking a set of predetermined questions, as would be the case in quantitative surveys. However, as this qualitative research was conducted to reinforce the quantitative data, predetermined questions were essentially based on the questionnaire form for quantitative research to probe more details. The interviewees are encouraged to express their views at length.

The interviews were recorded for transcription via Atlas Ti7 and all interviewees will be asked for their informed consent before the taping process. Interviews were conducted at the worksite or Malaysia Airports Holdings Berhad's Resource Centre (Library) depending on the interviewees' comfort level.

## 3.18 Data Collection

After permission was granted from the Human Resource Services Department of Malaysia Airports Holdings Berhad (See Appendix 9), a formal face-to-face meeting was conducted with the various informants, respectively according to their availability and convenience. The mix of more and less structured interview questions was investigated using an open-ended and less structured approach. Merriam (2009) points out that the interview questions need to be more open-ended. It allowed the researcher to respond to the situation at hand, to the respondent's emerging worldview, to new ideas on the topic, and all questions are more flexibly worded. The way open-ended questions will begin with "tell me more about that,..., give me an example of...., and share me in the previous time when ....?. The 'Jeading questions' such as "what emotional problems have you had when the management does not lead by example?", and 'yes-no questions' such as "do you like the leadership style in this organization?", or "do the employees are committed to the organization?" were not posted due to potential reveal for researcher bias of assumption, thus eliciting no insight required (Merriam, 2009).

Therefore, in this study, every interview session was conducted within one hour, encompassing information verification and providing further matters regarding the questions. It typically commenced with ice-breaking questions like demographical information (i.e., age, education level, duration as an employee), personal background, and events to expedite the conversation. Opting for this manner improved the respondent's comfort and allowed them to be more forthcoming during the rest of the session.

All interview data were logged and recorded using a tape recorder per Merriam's (2009) statement regarding its status as the most typical practice. It allowed every word to be preserved for the subsequent analytical processes. It enabled the researcher to improve his interviewing methods for the following respondents by listening to the audio recorded. All the interview transcripts were endorsed based on the interview conservation with the informants (See Appendix 11).

## 3.19 Data Analysis

Merriam (2009) described qualitative data analysis as the exercise in which data is approached and understood, encompassing the intricate alternating process between inductive and deductive reasoning. Such a process would finally yield the answer to the research questions. In this study, data analysis was conducted via inductive reasoning, indicated by the manner and the effectiveness of one person in distinguishing patterns and trends across a large-sized data. The approach was utilized according to the data obtained in investigating and substantiating the quantitative data analysis.

# 3.19.1 Steps in Data Analysis

In the first step, after data has been collected through interviews and reviews of documents, it was organized and reduced. The second step is data reduction which involves selecting, simplifying, and transforming the data to make it more manageable

and understandable (Hair et al., 2007). The process requires choices about what should be emphasized, minimized, and eliminated from further study. Predetermined research questions guide initial decisions, but the analyst continuously looks for new meaning and relationships. Thus, data reduction is driven by the relevance of the emerging themes and patterns to the study's research questions.

The third step is the data display. Data display goes beyond data reduction by organizing the information to facilitate concluding (Hair et al., 2007). The data display process helps this study manage information and view it to enable this study to establish linkages and develop explanations that relate the findings to existing theory.

The final step is drawing and verifying conclusions. The conclusion involves deciding what the identified themes and patterns mean and how they help answer the research question (Hair et al., 2007). This study starts concluding when data collection begins, not when it is complete. Verification involves checking and re-checking the data to ensure the initial conclusion is realistic, supportable, and valid (Hair et al., 2007). The process of drawing and verifying a conclusion is driven by the objective of looking for and ultimately identifying the best several alternative decisions or explanations, not by looking for a single explanation.

This study employed Computer Assisted Qualitative Data Analysis Software (CAQDAS), namely ATLAS.ti7, to analyze the data. This software allows the researcher to store, edit, and code the data. ATLAS.ti7 helps qualitatively analyse data collected through unstructured and semi-structured data collection methods and features methodological freedom, from highly deductive to highly inductive approaches to data analysis.

### 3.20 Interpretive Data Analysis

The interpretative analysis is applied to enable the researcher to understand the meaning of a phenomenon for those involved (Merriam et al., 2002) to understand how individuals make sense of their lives and experiences (Lichtman 2014) and interpret these meanings. A phenomenological study seeks to understand the essence and underlying structure of a phenomenon (Merriam et al., 2002). Thus, an interpretative phenomenological analysis approach is carried out to examine individuals' lived experience in detail. As a result, the meaning of the data from the written findings can be made sense.

## 3.21 Validity

In this study, validity was enhanced by implementing triangulation and member checks. Triangulation, in particular, referred to the use of multiple data sources in comparing and cross-checking data consistency at various times and places, or by different individuals having dissimilar outlooks, or via follow-up interviews with the same respondents (Merriam, 2009). Therefore, this study was implemented using selected informants based on Sergeant's (2012) criteria that display dissimilar outlooks and worksite, followed by follow-up interviews with them afterwards.

Meanwhile, Merriam (2009) defined member checks as the act of gathering data and preliminary interpretations of the individuals they were obtained from and confirming their plausibility. It was implemented to refine the data and ascertain precise interpretation of the emerging or preliminary analysis, which were best attained by eliciting feedback from the respondents themselves. The completed analytical sections of the interviews were also given to the respondents for any review and comment, whereby any response was also submitted as case material for validation purposes (Leedy and Ormrod, 2005).

The validity process was carried out through the conversation with the Senior Manager and Manager in charge to help the researcher find vulnerabilities (if any). The conversation was conducted both face-to-face and by email. The data obtained following the focus group discussion were subsequently validated in the pilot study with the research committees (research supervisor and subject matter experts).

## 3.22 Chapter Summary

In this chapter, the theoretical perspectives possessed by the researcher were briefly described. Methodologies utilized were also delineated to comprehend the organization being studied in detail. Moreover, the mixed-methods approach implemented in the study also allowed the amalgamation of the quantitative and qualitative approaches' respective strengths, despite their specific benefits and limitations. Quantitative data typically enabled many individuals and data to be analyzed statistically. In contrast, qualitative data underlined the respondents' precise words and opinions and offered a different and intricate perspective regarding the circumstances (Creswell, 2008). Therefore, the robustness of the data obtained in this study successfully helped extend the knowledge regarding the correlation between the investigated variables. The mixed methods approach to readdress the quantitative analysis using a qualitative approach also yielded insight into more in-depth detail and specificity after being subjected to the statistical tests (Creswell, 2008). Next, the following chapter will discuss the data analysis and result.