IMPACT OF AWARENESS, READINESS, CONTROL, RESPONSE, AND TECHNOLOGY USAGE ON CRISIS MANAGEMENT OF DRONES THREATS IN DUBAI INTERNATIONAL AIRPORT

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ABSTRACT

Drones offer many advantages but also present risks to sensitive areas like airports. The present study investigates the significant relationship between crisis readiness, crisis awareness, crisis control, and crisis response to crisis management. Specifically, this study examines the interaction of technology usage in the Dubai international airport in the conditions of drone threats. The target population selected for this research equates to the number of both senior and junior staff working at the Dubai international airport. There are thousands of staff working in the various airport operations but no official numbers have been made public. The data for this study came from 364 respondents, and it was gathered through questionnaires that were collected in person. The technique of sample selection is based on convenience. The results show that there is a 63.1% variance in crisis management that can be explained by the four independent factors. The finding further revealed that the ability to respond to a crisis has the best predictive power (Beta = 0.368), followed by crisis awareness (Beta = 0.319), crisis preparedness (Beta = 0.289), and crisis control (Beta = 0.107). The relationship between crisis readiness and moderating influence is not significant, however the other three variables have significant moderating influences. These findings are significant because they assess the Impact of Crisis readiness on Crisis Management, Crisis Awareness and Crisis Control of Drones' Threats at DIA. The study recommends an investigation into the awareness and readiness in managing drone crises at the UAE Airport to improve effectiveness and also performance of the organization and also speed in responding to growth.

Keywords: Crisis Awareness; Crisis Readiness; Crisis Control; Crisis Response; Technology Usage; Crisis Management; Dubai International Airport

ABSTRAK

Drone menawarkan banyak kelebihan tetapi juga memberikan risiko kepada kawasan sensitif seperti lapangan terbang. Kajian ini menyiasat hubungan yang signifikan antara kesediaan krisis, kesedaran krisis, kawalan krisis, dan tindak balas krisis terhadap pengurusan krisis. Secara khusus, kajian ini mengkaji interaksi penggunaan teknologi di lapangan terbang antarabangsa Dubai dalam keadaan ancaman dron. Populasi sasaran yang dipilih untuk penyelidikan ini bersamaan dengan bilangan kakitangan senior dan junior yang bekerja di lapangan terbang antarabangsa Dubai. Terdapat beribu-ribu kakitangan yang bekerja dalam pelbagai operasi lapangan terbang tetapi tiada nombor rasmi telah didedahkan kepada umum. Data untuk kajian ini datang daripada 364 responden, dan ia dikumpulkan melalui soal selidik yang dikumpul secara peribadi. Teknik pemilihan sampel adalah berdasarkan kemudahan. Keputusan menunjukkan bahawa terdapat 63.1% varians dalam pengurusan krisis yang boleh dijelaskan oleh empat faktor bebas. Penemuan seterusnya mendedahkan bahawa keupayaan untuk bertindak balas terhadap krisis mempunyai kuasa ramalan terbaik (Beta = 0.368), diikuti oleh kesedaran krisis (Beta = 0.319), kesediaan krisis (Beta = 0.289), dan kawalan krisis (Beta = 0.107). Hubungan antara kesediaan krisis dan pengaruh penyederhanaan adalah tidak signifikan, namun tiga pembolehubah lain mempunyai pengaruh penyederhanaan yang signifikan. Penemuan ini penting kerana mereka menilai Kesan kesediaan Krisis terhadap Pengurusan Krisis, Kesedaran Krisis dan Kawalan Krisis Ancaman Drone di DIA. Kajian itu mengesyorkan penyiasatan terhadap kesedaran dan kesediaan dalam menguruskan krisis dron di Lapangan Terbang UAE untuk meningkatkan keberkesanan dan juga prestasi organisasi dan juga mempercepatkan dalam bertindak balas terhadap pertumbuhan.

Kata kunci: Kesedaran Krisis; Kesediaan Krisis; Kawalan Krisis; Tindak Balas Krisis; Penggunaan Teknologi; Pengurusan krisis; Lapangan Terbang Antarabangsa Dubai

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LIST OF ABBREVIATION

CA	Crisis Awareness
CC	Crisis Control
CM	Crisis Management
CRE	Crisis Response
CRS	Crisis Readiness
TU	Technology usage
SME	Small and Medium Enterprises
UAE	United Arab Emiratis
SCCT	Situational Crisis control Theory
DIA	Dubai International Airport
CMP	Crisis Management Plan

CHAPTER ONE
INTRODUCTION

1.1 Introduction

There will be eight major subsections presented in the thesis' introductory chapter. The thesis begins with an overview of the study's context, followed by a statement of the problem. This is followed by a series of research questions leading to the formulation of research goals. The research scope and limitations, as well as theoretical and practical contributions, will be discussed later. Consequently, it will be stated as such before arriving at the final subsection that concludes the overall thesis arrangement that key concepts will be defined.

The goal of the present study is to determine how the management of Dubai Airport is affected by crisis awareness (CA), crisis control (CC), crisis response (CRE), crisis preparedness (CR), technological capabilities (TU), and risk management (CM). This study also aimed to identify the fundamental process thru which crisis management influences organisational effectiveness. This chapter includes a detailed introduction to the study as well as information about its background, problem statement, objectives, and questions.

1.2 Background of Study

Despite preemptive measures, the crisis is an impulsive natural phenomenon that can occur at any time (Pedersen et al., 2020). Crises can be organic or man-created, and they can occur as a result of lapses in preventive measures intended to assuage the well-known crises, such as: (Sandin, 2018). But even if, constructing a large dam to reduce flooding may result in ethnic or public wars because no tribe will be willing to give up its land as a result of this attempt.

In other words, managing crises is an essential tool for controlling and maintaining uninterrupted achievement before organizations can succeed in chasing their long-term goals. In accordance with Koushafard (2013). Additionally, proactiveness refers to a company's ability to implement multiple preventative measures. However, when crises occur, organizations 'primary CM strategies incorporate conflict, escape, corporation, and containment. In the year 2017 in Ghazi.

Organizational responsibility stems from the ability to deal with crises efficiently, successfully, and opportunely (Kluge et al., 2018; Koronis & Ponis, 2018). Information spreads rapidly in the age of technology, so controlling the spread of CM information is critical for managers and the organization's stakeholders. This is especially true in the event of a crisis when there are many different information sources to draw from. According to Bezes (in 2018) as well as Entman & Usher (in 2018).

As a result, the only strategies available for dealing with the majority of crises that have occurred recently are containment and escape (Beirman, 2020). Recent technical

developments have significantly improved the world's security (Raspotnig, Karpati & Opdahl, 2018). In addition, technological advancements have helped industries like government, athletics, aircraft, tourism, healthcare, and more (Bulman & Fairlie, 2016; Hu et al., 2019; Raspoting et al., 2018).

Technology has had both beneficial and adverse impacts on CM in the aviation sector, and it is still having an impact today, particularly at airports. For example, unethical behavior was exposed as a result of the use of technology (Al Shobaki et al., 2017; Amuna et al., 2017). However, advancements in new technology have significantly influenced to the premature deaths of airport travelers (Bernardi et al., 2017).

Drones are an unmanned aerial vehicle (UAV) that has grown more known recently (Tatum & Liu, 2017). Commercialization has occurred, however, and the drone market is expected to reach between A $5.95 billion and A $7.47 billion between 2015 and 2022. (Ahmed & Dowland, 2019). The use of drones as a breakthrough surveillance system has allowed the airport to keep tabs on a variety of different activities (Basso et al., 2018).

Drones are also deemed effective in monitoring and securing airports, as well as those in the immediate vicinity (Lykou et al., 2020). It's popular because it's less expensive than using satellites or hiring a chopper and a cameraman (Green et al., 2019).

Considering the effectiveness of drones, notably by the govt, there are indications that their beneficial use may eventually be "hijacked by the bad guys" (Fotouhi et al., 2019). Based on a cybersecurity consultant's warning, there are presently products on

the marketplace that have the potential to defeat drone safety (Ahmed & Dowland, 2019).

In light of this, there have been a number of drone crises in 2019, such as the terrorist drone attack on a Saudi oil field (Dudenhoeffer, 2020). In addition, a drone attacked a Russian military base in Syria in 2018. (Lavrov, 2018). However, in the past, drones have caused crises at airports because of attacks on military targets and oilfields (Samaan, 2020).

To say nothing of drone havoc at the busiest airports, like London Gatwick and Frankfurt, where customers were stranded because of the disruption caused by the drone, and over 800 flights were cancelled because of it; over 120,00 people were left stranded (BBC News, 2018).

When flying at higher altitudes, some commercial drones may appear safe because they cause no fatalities or significant damage (Hern & Topham, 2018). Such sightings had to be treated with the utmost caution in the wake of terrorist threats, however (Russia, 2018).

For example, Sathyamoorthy (2015) cites deliberate interference RF signals from airports, unauthorised unmanned surveillance, intelligence gathering, as well as mid-air traffic accidents with some other aeroplane are all potential threats. as potential dangers posed by drones. When it comes to countering drone attacks, Sathyamoorthy (2015) offers some ideas.

You can also deploy technologies such as GPS and geofencing to help you stay safe during disasters (Bennett, 2019). According to Weaver (2018)'s report, the Gatwick incident was so critical that the military was summoned to investigate the nature, type, and reasons for the use of a drone on an airport runway.

As a result of the Gatwick airport's presence, the Dubai airport has become the world's busiest (Henderson 2006; Zaidan 2017) as a strong threat to states like Dubai that normally depend on tourism business existence (Porter, 2019). This is due to the fact that the Dubai government refutes the claim that the country is heavily dependent on crude oil revenues and affirms that the economy exclusively relies on the travel industry.

1.3 Problem Statement

One of the many benefits of technological advancement is the email system, which reduces the amount of time it takes to post letters to the recipient, especially when sending them internationally (Rumble, 2019). Technological developments in the healthcare sector have improved precision and led to the discovery of previously unknown symptoms, saving tens of thousands of lives (Shuck, 2018; Tidd & Bessant, 2018). Students are immersed in the subject matter being taught as if they were practicing it thanks to technological advancements in the education industry.

On the other hand, technological advancements have resulted in the unimaginable early existence of life for millions of people worldwide. Examples include military weapons used in wars, as well as the cause of recent Boeing aircraft accidents (Justusson et al., 2019; Mowery, 2010).

The result is that businesses and organizations that embrace technological innovation should be prepared to engage in any of the four options outlined above: confronting the technology, avoiding it, or reacting to a crisis that results from the usage of these technologies (Ghazi, 2017).

However, even though drones have been equipped with weapons for the duration of armed operations, there have been no incidents where bad guys in the underground have hit commercial aircraft with drones, and the drones have not resulted in any serious casualties at airport facilities (Hern & Topham, 2018).

While evidence suggests that drones have disrupted airport service, thousands of passengers in the UK and Dubai remain stranded as a result of flights being diverted to other airports, cancelled, or delayed due to drone activity (Deulgaonkar, 2016; Hern & Topham, 2018; Porter, 2019).

Drone fatalities are therefore very likely to occur in the future now that a recent Saudi oil rig strike with a drone has been made public knowledge. However, because crises are unavoidable, how well a company responds to them can help boost its brand image in the long run. Because of this, the methods used to reduce the impact of crises (proactivity) are of particular interest in this study.

Barton (2001), Coombs (2007, and 2001) studies have shown that although CM isn't a plan for dealing with escalating crises but having a crisis team in place with pre-determined tasks and responsibilities helps companies save time when dealing with crises.

According to scholars such as Taylor and Kent (2007), creating a CRE website in advance of a crisis and running tests on it will give you a better idea of how it works. What remains to be seen, however, is how well-informed and prepared company employees are for emergencies. In light of the findings of the scholars, and in light of the recent drone incident at the airport, this study believes it is critical to reconsider airport CM consciousness and willingness in the age of advanced technology like drones, which have the potential to cripple airport operations and the economy as a whole if not handled properly. Since the 2001 hijacking incident, security has been tightened at the airport.

Despite devising ways to counter the ongoing security concerns at various airports, at times the security measures devised deviates from airport protocols and regulations hence, they do not contain the reality issues because most security decisions were framed based on informal groups decisions (Kirschenbaum et al., 2012).

Similar to the drone sightings that disrupt airport operations in Gatwick airport in the UK, Deulgaonkar (2016) reports that DIA had witnessed the same. This according to Deulgankar (2016) disrupt the airport operations and cost Dubai airport huge amount. Also, the author argues that if such continues, the image of Dubai airport can be damaged.

In relation to seeking understanding of fostering effective crisis management of drones threats, it is important to determine the influence of awareness, readiness, control, response, and technology usage. One of the most common challenges in the adoption of new technologies in organizations is related to the state of or perceived acceptance.

As suggested by Sumner (2007), the use of technologies in the airport setting represents as possible solutions to security threats but the methods adopted cannot be controlled such that they can easily be copied or compromised. As such, the same author noted that technology usage has been slow to gain acceptance in the airport setting.

At the same time, there are also issues concerning privacy and security when it comes technology usage in the airport setting thereby limiting acceptability of such technologies. For example, in using drone technology in the airport setting, this can attract malicious activities because drones can be activated and used almost anywhere and any time (Yaacoub et al., 2020). This denotes that problems and threats regarding privacy and security are highly common in relation to technology usage such as in the use of drones.

Correspondingly, there are also some issues relating to awareness and readiness in the use of drone technology in the airport setting. These issues are mostly associated with the awareness and readiness of managing crises when they occur resulting from drone incidents and drones not being handled properly (Al Jasmi et al., 2021). In addition to this, there is also the influence of human factors in the application of controls designed that work perfectly in the lab but not in the real world (Terwilliger et al., 2015). As explained by the same authors, it is necessary to maintain high levels of situational awareness needed for effective control of drone technology.

1.4 Research Questions

Based on the problem statement and background of the study, the questions to be answered by this research work includes:

1. What is the impact of CRS on CM of drones' threats at DIA?
2. What is the impact of CA on CM of drones' threats at DIA?
3. What is the impact of CC on CM of drones' threats at DIA?
4. What is the impact of CRS on CM of drones' threats at DIA?
5. What is the moderation TU in the relations towards CM of drones' threats at DIA?

1.5 Research Objectives

The objectives to be fulfilled in this research includes:

1. To assess the impact of CRS on CM of drones' threats at DIA
2. To evaluate the impact of CA on CM of drones' threats at DIA
3. To assess the impact of CC on CM of drones' threats at DIA
4. To evaluate the impact of CRE on CM of drones' threats at DIA
5. To examine the moderation TU in the relations towards TM of drones' threats at DIA

1.6 Research Scope

To achieve the objectives of this study, non-probability sampling technique was utilized to seek the awareness and perceptions airport users concerning the potential dangers of drones flying at the skies of airport. For this to be carried out, the researcher intends to obtain data from middle managers at the United Arab Emirate international airports. Similarly, the questionnaire will be distributed to the passengers plying the

UAE airport. With this, the perceived difference between the UAE airport management and the passengers were determined.

In addition, scope of the proposed study also relates to determining the variables (independent, dependent, moderation) of the study, developing the research design, selecting the population, finding the appropriate sampling method, formulating research instrument, choosing the method for data collection and finalizing the tools for data analysis and hypotheses testing.

From a practical point of view, this research adds to the body of knowledge on the relationships between CA, CC, CRS, CRE and CM in the unique context of in the Dubai Airport, United Arab Emirates. Moreover, the moderating role of TU between the relationship of CA, CC, CRS, CRE and CM is the main contribution of this study. There are many studies on CM in developed countries like the United Kingdom and the United States but very few are done in developing countries like the United Arab Emirates (Chandra and Kumar, 2018).

Due to cultural, educational, and socioeconomic differences, developed-economy findings cannot be applied in developing economies (Khan, 2010). As a result, the current research fills a knowledge void in both the Asian and developing world contexts.

For emphasis, in both Asian and developing contexts, CM is a relatively new concept in academic and practical fields. Furthermore, there are various empirical studies in developed-economy settings confirming that CC, CA, CRE, CRS and TU have

positive influence on CM. However, various researchers claimed that there is a need to perform more studies on CM in different environments and contexts.

In order to generalise, the current study broadens the environment for studying the CM idea in a growing and mostly untapped area. From a practical standpoint, this study adds to the body of knowledge concerning the public industry in the UAE.Thus, CA, CC, CRE, and CRS were proposed as independent variables that were anticipated to have an impact on CM (dependent variable). Moreover, it was expected that TU (Moderating Variables) would influence the correlation of the independent variables with the dependent variable. The present study followed quantitative research method. The managers of the Dubai Airport were served as population of the study.

1.7 Research Significance

At the completion of this research, it is opined that the result obtained will benefit both the academic world and the practitioners. It is opined that the result of this research will contribute to security beefing up against any potential drone threats that has a higher probability of disrupting the airport operations.

Meanwhile, theoretically, the findings of this research will add significant knowledge to the body of literature by highlighting the significant relationship that exist between the investigated variables amidst proactive measures in containing drone crises.

“Crises Management” is still a new phenomenon for many countries that is becoming very popular around the globe based on its effectiveness in almost all fields and among all types of organizations including public sector as well as private. Now a days almost

each and every person as well as, businesses have access to data, therefore, on the basis of correct data it quite possible to avoid crises.

Currently, most of the public sector organizations have CM department especially after Covid-19. This study will become a role of thumb for other organizations in predicting or avoiding crisis.

The aim of this study is to comprehend how the public sector utilize CM tools, in addition to conventional brick and mortar channels, for day-to-day business. Every organization has its own mission to shift successfully to CM. However, there are many advantages to using CM over more traditional methods that businesses may be unaware of, as well as fundamental issues and difficulties they may not fully grasp. Because of this, the findings of this study may be utilized to provide practical recommendations to Dubai airport authorities and other public sector institutes on how to better use CM tools.

The developing field of CM acceptance will need to receive expanding consideration to reach the excellent productivity of public sector organizations in UAE. When this research completed it must have important practical and theoretical consequences for the public sector since it is based on the UAE environment, which has yet to be studied. As part of the research, author will look at how best CM applications may be used to identify new areas of business practice.

Therefore, based on the current research, practitioners would be in a better position to serve the purpose of their organizations resulting into the awareness about benefits

associated with the adoption of CM along with properly addressing the ambiguities related to the adoption process by minimizing deficiencies.

As a result of this thesis, potential ideas for the formation of CM frameworks in the United Arab Emirates and elsewhere across the world will be conceptualized. Emiratis want to achieve flexibility and productivity frameworks, especially in the field of CM. This research is timely and vital especially since the aviation technologies in IR4.0 such as the use of drone is already booming. However, this also presents some problems within the airport setting including DIA. Hence, this research presents significant implications for policy makers and administrations in relation to the analysis of problems and finding of solutions. Also, this research has implications for the public such that it can help in enhancing knowledge particularly in the academic spectrum.

1.8 Operational Definitions

Five concepts are existed in the conceptual framework, as the following.

- **Crisis Readiness** – Is referred to as the accessibility of required resources to facilitate the organization to master the crisis management. This could include the availability of technology and monitoring systems, competences of the workforces, policies and procedures. Without crisis readiness organization cannot make an effective CM (Lerbinger, 2012).
- **Crisis Awareness (CA)**

CA is the ability of organization to recognize the situation of the threat based on the availability of the critical data. Data recorded by CCTV, radars, IoT devices can increase the organization awareness (Zaheer, 2019).

- **Crisis Control (CC)**

When a crisis occurs, it is important to control that has the capacity to connect and reach vital info. As soon as, it is actually certainly not automatically practical for everybody entailed to see all achievable info at. Specific players will require to observe certain kinds of details and only at the correct time. Possessing control over communication is a should for effective CM (Fearn-Banks, 2016).

- **Crisis Response (CRE)**

CRE is actually the true activity expected to be taken at the situational crisis. Ultimately, the factor of good communication is to make it possible for a fast and precise response. Decision makers may communicate quickly and accurately and successfully formulate an informed tactical response with conscious control. When it comes to security and enforcement, we can observe this in action since smooth and prioritised communications between police officers and command centres facilitates improved decision-making (Fearn-Banks, 2016).

- **Technology Usage-**

TU is using scientific knowledge for useful objectives or even treatments, whether in industry or even in our daily lives. Essentially, whenever we utilize or apply our scientific knowledge to attain some particular objective, we're making use of technology. Technology commonly involves a details tool, but that device may be surprisingly easy or intensely complex (Greenfield, 2017).

- **Crisis Management** (CM)

CM is the identification of threats or issues to an association and its stakeholders, and the strategies made use of by the association to handle these threats. Because worldwide celebrations are oftentimes unpredictable, organizations should manage to handle the possibility for serious improvements in the way they perform company. CM needs decision-making to be quick, usually after the event has transpired. A CM plan is developed by organizations so the uncertainty in case of a crisis is reduced (Fearn-Banks, 2016).

1.9 Structure of the Study

The five chapters of this particular academic work are organised as follows.

The first chapter is the introduction to this study. It is to present the research, outlining the problem statement and stating the research's objectives.

Second chapter is the reviews for the past times associated research in view of warranting the earlier said research study questions and investigation objective of this particular research study. Discusses the appropriate literary works pertaining to the present study. As a result, an examination right into the awareness and readiness in handling drone situations at the airport - an examination into UAE Airport.

The conceptual framework is illustrated in the third chapter's sections on study design and methodology. The conceptual framework is really covered, serving as the foundation for the hypotheses tested in this research study as a result. The research study approach for this particular research study is also covered in this chapter. It

describes the procedures and approaches used to address the research study question of this particular study and to confirm the elicited hypotheses.

The findings of the statistical analysis of the data collected are illustrated and discussed in the fourth chapter. In a properly interpreted description, there are methods for data testing, market analysis, thorough statistics, framework model evaluation, measurement model evaluation, and moderation evaluation.

The research study's review, conclusions, additional comments, limitation, ramifications, and referral are all included in the fifth and final chapter.

1.10 Summary

The primary justification for this study is the present study tests for the significant relationship between crisis readiness, CA, CC, and CRE to CM in the UAE airport. The study is bridging the gaps and allowing this study to be useful in the context of both the available data and its practical applications at the airport in the United Arab Emirates.

The research investigated the following goals in order to achieve this objective to evaluate the results of crisis readiness on CM of drones 'threats at DIA, to evaluate the impact of CA on CM of drones 'threats at DIA, to assess the impact of CC on CM of drones 'threats at DIA, to evaluate the impact of CRE on CM of drones 'threats at DIA, and to examine the moderation TU in the relations towards CM of drones 'threats at DIA.

The scope of this research is investigation into determinants and perception of people towards effective in the UAE airport. The study population consists of UAE employees and therefore this research examines the participant's perceptions in the UAE airport. The results of this study are beneficial especially to the organizations in the UAE airport. At the same time, it can give implication to other sectors in different fields, practitioners, owners, policymakers of the organizations, researchers and academics.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews past scholarly studies, citable internet documents such as reputable government portals, new portals and as well as textbooks and magazines to determine the direction of the research. In this chapter, the researcher conceptually explores drone technology adoptions and previous issues in the airport as well as other facilities around the globe.

Furthermore, the researcher review literatures about technology adoption in Dubai and Dubai airport, crisis definition was made, crisis management. Under this, the factors that cause crises were briefly mentioned. Besides, attention was given to how crises can be managed. Under this, the researcher identifies some variables that tally with the research problem statement, objectives and questions raised in previous chapter one. Towards the end of this chapter, an underpinning theory was used to support the research and the summary was given.

2.2 Overview of Dubai Airports

Since its founding in 1960, DIA has served over 402 million tourists, with an average annual growth rate of 15.5% (plus 1,000 visitors in 1974, 5,000 in 1990, and

10,000,000 in 1999). (Albeshr & Ahmad, 2015). It managed 3.87 thousand flights (12.4% annual growth rate) and 17.9 thousand tonnes of total cargo (an averaged annual increase of 14.3%). (Gupta et cetera, 2013).

The airport added a brand-new terminal (Sheikh Rashid Terminal) in 2000 as part of ongoing construction, increasing the airport's capacity to 23 thousand visitors annually (Gupta et al., 2014). The traveler visitor traffic maintained increasing as a result of to economic development along with over 20 thousand passengers in 2004 and 34 thousand by 2007 (Bloch, 2010). DIA handled 89.1 thousand guests in 2018, missing its aim at yet staying the world's busiest for international visitors (Highness, 2019).

Figure 2. 1 Dubai Map

Guest website traffic rose one percent in 2013, driver Dubai airport terminals documents, and its weakest yearly development cost in at the very least a many years and short of its own 90.3 thousand aim at (Highness, 2019). After fifteen years of significant development, Dubai Airport, the base for Emirates and fly Dubai, saw growth halt throughout 2018. (Wong et al., 2019), In addition to other factors, the Gulf's trip industry has been hurt by the region's financial stagnation brought on by

low oil prices. For anybody to find their way and obtain information about where to choose boarding their flight or immigration, DIA has staff, displays, and stands stationed at all crucial locations (Pomeroy, 2020).

The airport is well-prepared to handle any emergency situation or threat; security personnel are clearly visible everywhere in the airport, as is signage (Marshall et al., 2020).

2.3 Drone Technology Adoptions and Issues at the Airports

The adoption of Unmanned Arial Vehicles (UAV) also known as drones in airports across the globe has both pros and cons (Saad et al., 2020). However, the advantages are revenue generation for the airport management itself (Price & Forrest, 2016). Other opportunities created by drones in the airport are the creation of opportunity for private spaced individuals operating within the premises of the airport to operate a commercialized spaceport in which people can be conveyed through drones to nearby locations (Sammler & Lynch, 2019).

However, due to the rapid fall in the prices of the drone had made it acceptable in the public as such, the positive usage had, in the cause of time increased (Sandbrook, 2015). Moreover, the usage is not limited to securing or monitoring intruders from entering facilities such as pipeline vandals, government restricted areas and as well airports as well as areas prone to violence (Wright, 2014).

Despite its advantages, drones can pose a great threat and danger to the safety of smooth operations of the airport (Willassen et al., 2020). The challenges, according to

Price and Forrest (2016), mostly occur from the operations of the drone by those who are not aware of the airport safety rules and regulations or those who deliberately ignore and fail to comply with the airport rules and regulations (Calandrillo et al., 2020).

Furthermore, Price and Forrest (2016), argue that individuals operating a drone near the airport facilities can be a source of threats to the entire airport operation leading to crisis issues. With this, the authors urged CM mangers to be aware of the situation and improve their knowledge and understanding of the latest development in the aerospace industry (Saroj & Pal, 2020). Price and Forrest (2016), they believe that despite the pros that drone presents, they also serve as the major source of intrusion that can wreak havoc beyond repair if care is not taken into consideration.

Drones were also found to pose security threats to airports mainly because they can be used by almost anyone at any time. According to Pyrgies (2019), UAV's can be weaponized and used illegally for criminal or terrorist operations on and around the airport. The same author also identified disruption of air transport resulting from closure of runways and from collissions and near misses with passenger aircrafts. More so, there are also security risks in the airport setting due to unauthorized use of drones but even authorized use also presents different levels of risks (European Union Aviation Safety Agency (EASA), 2021). This is shown in figure 2.2 below.

Figure 2. 2 Categories of Drone Operations Specied by European Rules on Drones (EASA, 2021)

Consequently, the use of drones also pose challenges to airports related to legal and policies particularly in terms of countering drone threats. According to Transport Security International (2021), the struggle of airport operators in containing drone threats is mostly due to confusing laws and policies on relation to airspace, operations, and security. As such, airport operators and officials are treating drone threats with considerable caution (Congressional Research Service (CRS), 2020). Finally, airport operators are highly concerned with cyber threats from drones. According to Best et al. (2020), cybersecurity threats is a key technological trend and the use of drones increased the likelihood of drone-related cyber threats.

2.3.1 Drones Danger to Air Travel

The number of drones owned by individuals increased dramatically during the past decade (Hodgkinson & Johnston, 2018). In USA, 1.3 thousand drones currently signed up with the Federal Aviation Administration (FAA), up from regarding 470,000 in

2016 when drone registration was first needed, anybody can view that there are actually even more drones in the air than ever.

While a small percentage of these drones are actually functioned for office reasons through certified small aviators, the extensive bulk are run through hobbyists for exciting and recreation (Miah, 2020). The enthusiast pilots are actually needed to fly under the security advice of a model aircraft institution, like the Academy of Model Aeronautics (AMA), and they have to keep their drones in sight, listed below 400 feets, and out of airspace indicated for passenger-carrying aircrafts (Elias, 2016).

The office drone flies have to follow and understand through similar guidelines, yet unlike hobbyists, they have to take an FAA test to prove it (Jain, 2017). The end results revealed that 7% of drone trips tracked went beyond 400 feets, and 21% exceeded the suggested max height for the area in which they were actually running (Wallace et al., 2020). In one scenario, a drone was sensed at an altitude of 90 shoes within a quarter kilometer of the way course to an energetic runway.

Drone drivers and airport workers as well concur that drone discovery records may be problematic (Pensieri et al., 2020). To be sure, drones are actually challenging to recognize coming from the cabin of an aircraft. They are actually hard to identify at all (Huttunen, 2019). One study coming from Oklahoma State University discovered that even when they were seeking drones, the flies of little airplane detected drones only when they were a tenth of a mile away typically (Burgett et al., 2019).

This might actually be actually result in for higher concern. Perhaps it's what pilots are certainly not seeing that ought to fret our team (Culp, 2016). Additionally, the Drone operators and airport workers identical agree that drone glimpse reports can be suspect, to be sure, drones are actually difficult to identify coming from the cabin of an aircraft. In reality, they are hard to find whatsoever (Calandrillo et al., 2020).

One research study coming from Oklahoma State University located that even when they were searching for drones, the pilots of tiny aircraft sensed drones simply when they were actually a tenth of a kilometer away typically (Burgett et al., 2019). This might in fact be induce for more significant concern.

Maybe it's what aviators are not viewing that should stress our company (Jain, 2017; Wolf, 2017). Inevitably, some kind of recognition and monitoring will be demanded, yet it will need to be a various system coming from what plane make use of right now, or we run the risk of overwhelming flies and air website traffic operators along with relevant information and mess (Hodgkinson & Johnston, 2018).

The harm from a crash depends upon the mass of the object being actually struck and the effect velocity, yet likewise the quality of the object, the slant of influence, and the frangibility of the things, or exactly how quickly it separates.

That is actually a ton of variables, but precisely the greatest damages will take place coming from a 90 degree effect of a hefty drone when the aircraft is actually relocating at broadband (Greenfield, 2017).

Provided the unknowns, the greatest possibility is precisely not to reach a drone in all, yet as we've seen, that's not so quick and easy to promise (Wolf, 2017). Whether you are actually a drone aficionado that is actually tired of being actually pointed the finger at for everything, or even a private citizen that watches out for the noise, hassle, and potential privacy threats from drones, we all may agree that this technology has massive possibility to enhance our lifestyles in a many thousand different methods we may hardly however think of (Brown et cetera, 2016).

In USA, 1.3 thousand drones right now registered along with the Federal Aviation Administration (FAA), upcoming from concerning 470,000 in 2016 when drone registration was 1st demanded, any individual can see that there are actually a lot more drones in the sky than ever previously. Drone drivers and airport staffs equally agree that drone sighting records can be actually problematic (Pensieri et al., 2020).

One research study coming from Oklahoma State University found that even when they were actually appearing for drones, the aviators of little airplane spotted drones simply when they were a tenth of a mile away on standard (Burgett et al., 2019).

The Drone operators and airport workers as well agree that drone discovery reports can be suspicious, to be certain, drones are difficult to determine coming from the cabin of an aircraft. One study from Oklahoma State University located that also when they were actually looking for drones, the flies of little plane recognized drones simply when they were actually a tenth of a kilometer away on standard (Burgett et al., 2019).

2.4 Dubai Airport and Technology Usage

Dubai is known for being highly reliant on technology (Zaidan, 2017). With that, the airport is expected to be heavily guarded with the most advanced technologies especially taking into account the nature of the crisis, there is no guarantee with regards to the safety (Cuijpers et al., 2020). The possibility of drone attacks prompted the decision to implement the technology called ‘geofencing’ to restrict flying of drones over restricted areas as indicated by Sathyamoorthy (2015).

Notwithstanding the Dubai rule prohibiting the use of unmanned aircraft within five kilometres of an airport, from 2016 to 2019, 2 drones sighting have been reported in the prohibited area (Porter, 2019). However, there is currently no evidence to support the installation of such technology for the safety of Dubai's airport facilities (Porter, 2019; Ranter, 2017). In addition to being the third busiest airport terminal globally in 2018, DIA is a pioneer in the application of artificial intelligence (AI).

According to Almarzooqi, the United Arab Emirates (UAE) is the Arab region's pioneer in the advancement of artificial intelligence (2019). A budget set aside for the procurement of cutting-edge technology and AI tools is set aside for the Ministry of Artificial Intelligence in the United Arab Emirates, which also has an AI approach.

According to the UAE Ministry of Interior, immigration police officers will be obsolete in the UAE by 2020, when artificial intelligence will take their place (Bjola, 2020). It's the goal of artificial intelligence (AI) to check people as they walk through an AI-powered surveillance system without removing their shoes or even waistbands

(Chui, 2017). However, a virtual aquarium intelligent gate is currently being tested at DIA's artificial intelligence facility (King, 2019).

Passengers would pass thru a narrow tunnel that is filled with fish (Lem, 2020). As they saw the fish swimming around them, sensors were able to capture every angle of their faces, enabling quick identification (Karetzky & Er, 2020). The head of Emirates, the largest long-haul airline in the world, believes that automation should currently be going to handle all aspects of hand luggage service, including bag identification, placement in the appropriate bins, and removal from the aircraft without human involvement (Karadoan, 2019). (Acemoglu & Robinson, 2019).

The country's air traffic control system may incorporate artificial intelligence, according to the Dubai airport. (2017) Weigang et al. UAE's approach is to examine how advancements in artificial intelligence and other new technology may improve the aviation industry (Fischer, 2018).

Moreover, the expert system with objectives to improve safety and security and effectiveness within sky traffic administration, this is important job that could ultimately influence identical functions all over the world (Liang et cetera, 2019).

Self-driving vehicles powered through fabricated knowledge and 100% electrical or photo voltaic electricity will definitely very soon be aiding the Dubai Airport enhance productivity in its daily operations, featuring enhancements between ground transit and sky traveling (Karmakar & Sahib, 2017).

Consider how artificial intelligence (AI) could plan a visitor's journey from of the airports where they arrive to the airline where they depart (King, 2019). While the operation of screening passengers to guarantee secure air travel receives a lot of attention, fake information can also enhance the workers space method (Engstrom et al., 2020).

Almarzooqi (2019), who pointed out that the United Arab Emirates (UAE) obviously leads the Arab region in terms of cultivating artificial intelligence in a variety of other industries and spheres of life, has a governing party that prioritises manufactured intellect that includes an AI technique and Department of Artificial Intelligence as well as a mandate to invest in cutting-edge technology and AI tools.

The Dubai airport is now experimenting with a spectacular entrance featuring a digital fish tank (King, 2019). Imagine how human ingenuity may conceivably control traveler behaviour from their arrival at the airport to their departure from the airport in their location (King, 2019).

2.5 Overview of Crisis

A crisis can be described as any event that have the potential of causing unprecedented change to an organization that can be positive or negative (Waryjas, 1999). On the negative side, the study of Waryjas (1999), argues that crisis is a fundamental threat to reputation, wellbeing, and credibility.

Moreover, the crises, as observed from earlier pieces of literature, can either be natural disaster examples of which include Tsunami, landslide, fire outbreak, sinkhole, and

heavy rain or snowfall to name few (Bolt, Horn, MacDonald & Scott, 2013; Keller & DeVecchio, 2016; Montz, Tobin & Hagelman, 2017) or manmade crises such as insurgency, drone attack, terrorist attack burglary, theft, militancy, protest, and carjacking to name few (Akpeninor, 2013; Lakoff, 2007; Mcginty, 2012).

According to the Cook (2015), on the other hand argue accident, financial mismanagement and legal might be the causes of the crisis, if not handled properly can lead to loss of market share, loss of company and can as well dent the company's brand image. Meanwhile, the observation from the study of Cook (2015), pointed out that crises might not necessarily mean a negative event, it can as well mean any disruption in the normal business operations giving examples of new market opportunities that leads to prompt a change in a business model.

While the study by Festag (2017) argues that most of the crises caused are as a result of human behavior. Furthermore, it was concluded by the scholar that at most times the plan or readiness to avoid similar crises often fails to achieve its intended objectives (John-eke & eke, 2020). However, the considering the various definition of crises by earlier scholars, the researcher, therefore, defines crises as any interruptions which might either be positive or negative that requires a prompt response by the organizations or firms (Pedersen et al., 2020).

To manage drones 'intrusion around the aviation facilities, the study of Sciancalepore et al., (2019), presented a scientific method of detecting the nearby drone signals, the range at which they fly by discriminating their movement and as well the location of those flying them.

2.5.1 Crises in the Aviation Industry

One of the industries which are highly probable to dive into crises at any point of time is the aviation industry (Popa, 2020). According to existing literature, there were several attacks that the industry was confronted with over the years which include drone issues, terrorist attacks, and problems related to politics and the economy that have caused functional and operational disruptions (Cannon, 2020).

At the same time, the aviation industry experienced financial crises as a result of dire economic conditions (Wharton, 2019). While the blog post by Mo (2018) listed crises in the aviation industry to include Foreign Object Debris which includes stray human beings, animals, debris on the runway and so on. These foreign objects cause a crisis for the airport authority.

Furthermore, Mo (2018) mentioned that a crisis can rarely be caused by aircraft collisions, Aircraft Sabotage, the pilot error that is synonymous with the human error as noted by earlier researchers including (Festag, 2017; Wang & Pitsis, 2019).

More so, Mo (2018) emphasized that mechanical failure can lead to crises in the aviation industry. Some examples include the one involving a Japanese airline which dove shortly after takeoff. The Indonesian and Ethiopian airlines also shared the same fate. Crises by nature such as bad weather, lightning strike and bird strike are also listed by Mo (2018).

2.6 Conceptuall Framework

Current study recommended a specific framework which will help to manage drone attack crises at the UAE Airports, CRS, CA, CC, CRE, to CM. While TU, as moderation relation to effective in the UAE Airport. See figure 2.2 Research Framework

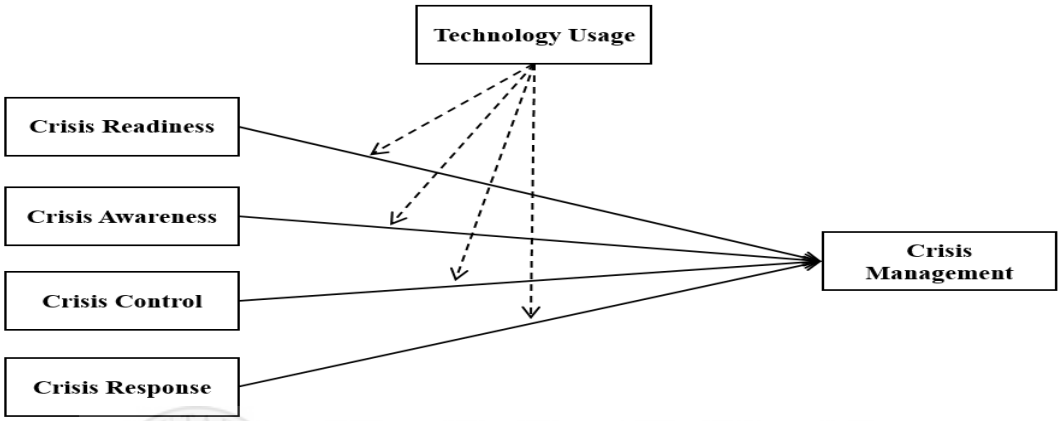

Figure 2. 3 Research Framework

2.6.1 Crisis Readiness (CRS)

Corporations must employ planning as a crucial and potentially life-saving step in the event of unforeseeable events (Eckhard et al., 2019). According to a previous study by Waryjas (1999), nearly 50% of the organisations evaluated lacked a crisis management strategy, yet the same survey also found that roughly 97 percent of the businesses are ready to act effectively in the event of a crisis.

And this is particularly true in cases of humanitarian crises where the crisis management plan was developed using conflicting facts (Festag, 2017; Wang & Pitsis, 2019). Festag (2017) argues that the inability to manage crises is due to the rarity with which prior human behaviour crises share traits with novel crises. Festag (2017). (2017).

Regaining public trust and controlling crises are important for administrations' financial and non-financial values. Specifically, the aerospace and aviation industries will do well (Pitsis, 2019).

Despite the fact that crises are regarded as unprecedented and immoral events that generate worry, danger, turmoil, and tragedy on the exterior front, crises are not necessarily unethical events that occur on the internal front (Cornia, 2019). In any case, depending on how well a company is prepared, the fallout from crises can be positive or negative (Finsterwalder & Kuppelwieser, 2020).

Furthermore, when it comes to CM readiness, previous studies show that the majority of methodologies ready to include or manage crises have a negligible effect or are completely ineffective when they occur (Festag, 2017). Smits and Ezzat Ally (2003) found that despite the fact that material readiness may not always match low-projected crises, opportunities to manage crises will be lower if CM is lacking in non-developmental readiness. According to their findings (Brown, 2019). Freitas (2016), on the other hand, asserts that the majority of emergency response personnel are either killed or seriously injured during a crisis.

There is a strong correlation between crisis readiness and human resource management factors such as organisation structure, unlearning, and organisational strategies (Alharbi, 2018). When designing training and getting crisis workers ready, Freitas (2016) mentions a number of factors, including a poor data collection method and ineffective command chain structures.

However, Festag (2017) found that CM protocols put in place to help with crises in various situations were actually making things worse. According to Festag (2017), one of the major problems that exacerbates crises is the failure to take human behaviour into account when creating protocols for managing crises. Conclusions drawn from a review of the literature show that many organisations are unaware of the importance of proactive crises readiness management (Ritchie & Jiang, 2019). While the organization's crisis readiness, which believes it is fully prepared to handle potential crises effectively and efficiently, did not achieve the desired result (Van der Meer & Jin, 2020).

This is for the reason that they are reliant on the sequence of instruction, which is rendered useless in times of crisis by the manager's knowledge. Logistics readiness is important in managing crises because it provides the needed knowledge, including precise explanations of where and how the unpleasant incident occurs and situation awareness, according to Salfinger et al., (2016). In addition to being aware of the situation, crisis managers who are involved in responding to crises events were most concerned with making sufficient arrangements to realistically and manage crisis (Wang and Pitsis, 2019).

This is due to two major factors, namely, "technological materials and human factors", which have failed to achieve their intended objectives in the "plan to contain and manage anticipated crisis readiness effects" (Etemad, 2020).

2.6.2 Crisis Awareness

Recognizing a problem or being aware of a crisis suggests that it can be controlled or controlled (Wang & Pitsis, 2019). According to academics, the CA doesn't really necessary mean that the performer is fully aware of all potential crises; instead, it requires that the performer be able to detect important hints, shifting circumstances, and a comprehensive information aspect. 2020 (Holford).

The initial step in taking care of a crisis is understanding the complete degree of what is actually taking place, this is actually basically concerning awareness of the condition (Kornberger, 2019). Permits consider this instance, airport security officer is walking her beat, and witnesses a safety violation taking place, in a situation such as this, accessibility to critical data can substantially boost the officer's situational awareness so she can react in an ideal way (Wolf, 2017).

One key factor to consider is just where the protection breach is occurring. Geolocation data is actually important for awareness of the condition, as it enables the officer to right away recognize her site and interact the address to her order center (Teixeira et al., 2020), next, the police officer may quickly situate officers or even various other Airport protection information in her area.

Nearby officers will certainly look out to the scenario and given step-by-step directions to the setting, while officers outside the prompt vicinity are going to understand to be on standby (Culp, 2016). Likewise, historical data may be helpful for adding circumstance to the situation. Airport protection department could possess a log of

current criminal task in a place, giving them along with a dive begin on identifying potential suspects (Perritt Jr & Sprague, 2016).

Access to real-time sensing unit data is also becoming vital for police officers (Jagtap et cetera, 2019). When police officers can easily take advantage of location cam nourishes paired along with weapon detection or even face awareness program, they may readjust their response and take measures to maintain themselves and citizens safe and secure (Li, 2019).

Furthermore, if the criminal seeks to flee the scene, license platter recognition (LDR) sensing units can easily assist police officers promptly locate the suspect (Jones, 2013). Those cops could also alert neighbouring communities if the issue enters their territory by using geo - fencing software (Jain, 2017).

Subsequently, based on Wang & Pitsis (2019), raising public awareness about crises is an important part of crisis management. The importance of being aware of the situation and having effective CM was concluded by Appelbaum et al. (2012) in another study.

“There is evidence that most organizations have failed to contain negative crises because they are under-informed (unaware) of the crises' nature or impact”. “Contextual awareness plays a significant role in relation to information about potential crises, situation dynamics, representation and use of the information available in the CM awareness stage” (König et al., 2020). Being aware of the potential crisis.

The research by Freitas (2016) reaffirmed the significance of safety training while a crisis is happening as a precautionary factor to contain the existing crises and does not only require actors to be conscious of potential crises. Additionally, academics have increasingly highlighted the role of social media networks for CM by raising awareness (Salfinger et al., 2016).

However, the scope of this investigation does not include public communication of crisis events. As a result, this research does not examine the available literature on communication awareness. Earlier research suggests a link between CM awareness and efficacy (Wang & Pitsis, 2019). Evidence was established by Gaba Howard and Small (1995) that, if a circumstance is going to be crisis-prone, becoming aware of it is the initial step in controlling it. Wang and Pitsis (2019) therefore come to the conclusion that creating awareness is an essential initial step in crisis management.

crisis events effectively, the actors must be fully aware of all that has gone wrong (Nohrstedt et al., 2018). The fact that crisis managers are aware of them allows them to devise strategies for dealing with them effectively, according to Freitas (2016) In addition, information gathering has been identified by previous researchers as a component of awareness.

Crisis managers can analyse how to manage them by anticipating prospective crises, according to Retschitzegger and Pröll (2016). Sharing of information with CM participants is crucial. In order to handle any prospective catastrophe, Wang and Pitsis (2019) say Critical elements of the CM awareness stage include information about

potential crises, the characteristics of the circumstance, as well as the organization and use of the info available Abu Amuna et al(2017).

2.6.3 Crisis Control

It isn't always beneficial for everyone involved in a crisis to see all of the available information at the same time (Payne et al., 2018). Certain types of information will have to be found by the players, depending on the circumstances (Harder et al., 2017). Having control over communication is actually a need to for effective crisis management, as shown through this community surveillance instance (Jain, 2017). Control that has the ability to communicate. For area protection teams, there are actually several stakeholders that could have knowledge right into any type of given crisis (Sovacool et cetera, 2020).

If a happening takes place, an effective communication system are going to simply send out informs to close-by police officers and open a communication channel to a still-smaller group of policemans as an example, those charged along with responding to the crisis. Farther officers may possess extra exposure into the accident (Joyal & Seidman, 2019).

Private citizens will certainly not be actually informed to the official networks, however could obtain alarms and advise safety and security if they see suspicious activity that may be related to the accident (Ulmer et cetera, 2017).

The control what information is actually on call, not every stakeholder requires to possess full, quick insight whatsoever opportunities, In some cases, a lot of info can

sidetrack coming from the most critical junctures at hand, and signals and details ought to be actually focused on by site, importance, and relevance. (Jacobson, 2010).

In various other situations, info in the wrong hands can easily show a danger, for instance, police officers should be able to view one another's sites, yet the public should not have this information, as bad actors might after that manage to target less highly airport safety places (Ulmer et al., 2017).

Such relatively small protection teams also have to have immediate ways of communicating like voice, video, and text, as well as actual understanding of developing ecological ailments, because the CC when information is easily accessible, for society gatekeeper, communication speed may make the difference between urgent (Bland, 2016).

The preparation and realisation that human awareness of and improvement in error is the foundation for developing effective CC (Comfort, 2007). It is essential for very mutual understanding and synchronisation of activities among urgent response associations in the CC practise (Kim et al., 2019).

Additionally, the various organisations and municipalities partaking in crisis processes at different spots have discussed specifics at the CC level, making it easy for all performers to recognize the limitations on each and the potential combinations of cooperation and assistance among them under a specific set of circumstances (Tatham et cetera, 2017).

Having said that, the CC is actually often accomplished via usual training, years of communal experience, and qualified communication one of individual urgent response workers (Reuter & Kaufhold, 2018).

Whenever the requirements of disaster protocols have included a stable of different entities from the charitable and commercial sectors, as well as individual members and community organizations, the CC poses a serious problem (Sewordor et cetera, 2019). Identifying the failure of the international unanticipated emergency preparedness system is crucial for CC crisis operations, and cognition is relevant in this regard (Son et al., 2020).

The CC crystal clear understanding of the extent of the developing threat, the plan producers performed not enlist efficiently in the type of system wide communication (Finsterwalder & Kuppelwieser, 2020). The more powerful sychronisation of preparedness and response functions and boosted control over the vast scale of tasks required to alleviate, react, and bounce back coming from the ensuing destruction (Shittu et al., 2018).

The irregular design of catastrophic monitoring activities is explained by the dependence of effective communication on cognition and, conversely, by the dependence of effective control on communication (Luna & Pennock, 2018). In catastrophe operations, the CC may not truly be accomplished through prescribed measures alone (Imperiale & Vanclay, 2019).

Instead, it develops through a process of quick danger assessment, combining of information from various sources, the ability to create game plans for activity, recognition and correction of error, and constant tracking and feedback among key stars (Stouten et cetera, 2018).

The rigid restrictions imposed by the current organisational structure and the procedural requirements of the national response planning and the nationwide event monitoring system will undoubtedly prevent this procedure from operating properly on a large scale (Greenhill et cetera, 2020). Instead, including cognition in the technique acknowledges the need to include gradual strategies for adjusting to strong, uncertain health situations as CC develops and fades (Liu, 2019).

It is essential for good communication and a balance of operations among emergency response agencies while using the CC technique (Kim et al., 2019). The various associations and legal systems participating in disaster functions at various sites all readily recognise the limitations on each other and the possible combinations of cooperation and assistance among all of them under a particular set of circumstances due to the CC level of shared pertinent information among them (Tatham et al., 2017). The CC is a major challenge when crisis functions call for a variety of diverse non-profit and private sector organisations, as well as individual families and local teams (Sewordor et al., 2019). Understanding the failure of the intergovernmental urgent management system for CC crisis operations depends on the importance of cognition (Son et al., 2020).

2.6.4 Crisis Response (CR)

It goes without saying that the key to efficient communication is to enable accurate and prompt control, response, and awareness that allow stakeholders to interact productively and form an informed planned response quickly (Kaziba, 2020). Additionally, better decision-making is made possible through structured and prioritised communication between police officers and demand centres in the fields of protection and policing (Ali Mohamad Jibai, 2018).

To guarantee that officers achieve the level of balance needed to respond to challenges successfully, unique processes and pre-planned tactics might be created (Gransen, 2019). The use of highly efficient workstream partnership tools must be a component of such planning (Scobie & Clarke, 2020). By giving police personnel the ability to create collaborative feedbacks on-the-fly, mistakes can be reduced and management can maintain better control over how their officers respond (Yanmaz et cetera, 2018). This kind of equilibrium is essential when the safety, security, and security of entire neighbourhoods are threatened (Gephart et cetera, 2018). A CRE is typically viewed as an erratic event that could result in negative results and endanger organisational credibility and reputation (Park, 2017). To protect themselves from a decline in reputation, the organisation must properly communicate with everyone about CRE (Claeys & Coombs, 2020).

The initial crisis responses (foundation actions) include providing information (what happened, how the crisis may affect the community, and what the community should do) and modifying information (what the company is actually doing to prevent a repeat of the disaster) (Richards et al., 2017).

Credibility repair service methods can easily be used to restore or stay clear of any kind of reputational harm (Coombs et al., 2016). Although bottom responses are demanded for all problems and might be combined with credibility and reputation repair service methods, base responses have obtained little interest in previous research studies (Ma, 2020). Numerous studies have centered a lot more on online reputation repair service than on base response or even no response (Tao & Song, 2020).

It is important to understand how various CRE strategies, such as no reply, base reply, reputation repairs, and each base reaction and online image fixing, affect the public's perceptions of affiliation (Vafeiadis et al., 2019).

Pertaining to for the CRE strategies, concentrates on advising techniques to identify the efficiency of helping remind customers of an institution prior greats, because several company take advantage of strategies in these times (Kriyantono & McKenna, 2019).

It is important to consider how the CRE might be connected, particularly when the crises is connected to a provider's earlier efforts (Claeys & Coombs, 2020). Techniques, including corporate online reputation, investments motivation, and negative word-of-mouth, are used to establish a cause-and-effect relationship between the CRE approaches and certain crisis consequences (Claeys & Coombs, 2020).

As a result, we might propose that EC includes digitally enabled commercial transactions between and among organisations as well as between and among the people who comprise them (Laudon and Traver, 2013). Economic progress is

increasingly being fuelled by advances in technology. Chan et al., (2001) found that ICT and EC are crucial to economic and social transformation in their research of the principles and functions of EC.

The impact of EC on overall economic development has been studied extensively in empirical research studies. Businesses in developing countries have traditionally faced obstacles such as restricted entrance to data, heavy initial costs, and a lack of exposure to new markets. According to Cohen et al. Firms in developing countries can benefit from EC adoption because of the strategic information and operational advantages it provides, according to Moodley and Morris (2004) as well as Molla and Heeks (2007). Researchers discovered that EC promotes an arrangement of advanced organizations, marketplaces, and exchange societies. According to Molla and Licker (2005), companies must take benefit of E-commerce's innovations to develop their marketplace moves, benefit from economies of scale, and grow into additional profits while also helping the economy grow.

In CRE supply the strongest body systems of evidence, each research study collection uses evidence-based examinations of the optimal and sub-optimal approaches to use especially crisis situations creating all of the normative theories (Coleman, 2020).
The preliminary crisis actions (base actions) include advising information (what occurred, just how the crisis might affect the public, and what the people ought to perform) and changing details (what the firm is actually carrying out to stop a loyal of the crisis) (Richards et al., 2017).

Foundation reactions are needed for all dilemmas and could be actually mixed with credibility and reputation fixing tactics, base feedbacks have gotten little bit of attention in previous research studies (Ma, 2020). It is actually crucial to recognize the impacts of different kinds of CRE techniques such as no response, core response, online reputation repair service, and both core response and credibility and reputation repair on the public's impressions of institution (Vafeiadis et al., 2019).

2.6.5 Technology Usage (TU)

Lately, there have been more and more crises dealt with through institutions, and there has been actually a considerable adjustment in the assumption of challenges in the business of crisis management, because of that associations have made a lot of research to find effective methods to handle these situations (Merendino & Sarens, 2020).

If you want to decrease losses, and between these techniques we find communication, and with the help of the technical progression, taking care of problems comes to be practical (Saroj & Pal, 2020). A communication channel is the procedure whereby a message is actually supplied, there has actually been a rapid growth in the variety of channels accessible to institutions to make use of to communicate with their stakeholders, due to innovations in technology (Alam et al., 2018).

In present day cultures, technology participates in an important duty and therefore generates brand new technical challenges (Huda, 2019). Nowadays, the CM is not able to run properly without the help of the technology (Guembour & Nadira, 2018).

So as to locate an optimum function model in CM it becomes a lot more recurring to take the conveniences of a variety of technical advancements (depended on computer and agent-based structure) or company remedies (cloud processing) (Jarosz, 2018). Within this area, an overview of new technical opportunities for boosting CM is given (Schröter et cetera, 2020).

The existing system assessment in advance and before the breakout of the crisis, it stands for among the primary difficulties of (Doza et al., 2020). There is actually an enhancing awareness of various other CM elements, such as usage of present-day info and communication technology, and the hunt for communication platforms capable to give sufficient functions (Dadgar & Joshi, 2018).

News coming from socials media is of terrific value and is unbelievably beneficial throughout choice making process (Almeida et cetera, 2019). It transforms out, that the very first thing that unintentional witnesses usually tend to perform is to report mixeds media material on social networks, rather of reporting it to the suitable CM companies (Amaral, 2019).

Thereby, there is actually a necessity for CM agencies to entirely observe those social networks with respect to removal of beneficial, approximately time and distinct pieces of relevant information regarding given incident (Plotnick & Hiltz, 2018).

Currently, there is no singular dream for the CM telecommunication system, lots of companies have actually performed some technology updates without obtaining the authorization of other stakeholders (White, 2011). There is actually additionally an

absence of an ideal telecommunication remedy, which will definitely comply with the demands of each stakeholder (Cook et al., 2019).

Consumers have come to expect EC's products and services. Businesses and consumers alike will be influenced by it in the future in how they sell and market their products. EC, according to Porter (2001), reduces transaction costs for economic actors, promoting the application of marketplaces to organise economic movements, boost corporate accomplishment, as well as encourage consumption. When used properly, e-commerce can open up new markets for transnational commerce and help spur growth and development (Singh, 1999).

According to various research, the European Union makes a significant contribution and has significant ramifications for emerging nations. Boateng et al. (2008) analysed 181 published articles to develop a roadmap for EC research in developing countries. According to the findings, there are still many questions about environmental contamination in developing countries that need to be addressed going forward.

As a result, the authors of Boateng et al. (2008) constructed an incorporated conceptual model that linked EC with socio-trade and industry development in developing countries. More than a billion Internet users bought supplies from EC websites in 2013 (Statista, 2016), proving that EC is rapidly expanding.

This seismic shift in the digital retail landscape, coupled with an ever-increasing user base, has compelled EC firms to stand out from the competition and find new ways to

serve their customers. For EC companies, the unique challenge is to give their online customers a tactile "try before you buy" knowledge through valuable medial content. This has improved as the number of online customers with a wide range of requirements has risen. These customers are becoming more curious and demanding in terms of visual and tactile simulations. This has led to the integration of valuable media substance into websites such as superior resolution of selling product images, different product videos, and 3D view to improve the buyer understanding (Hassouneh & Brengman 2011; Hassouneh & Brengman 2015). A new paradigm in EC is being created by EC companies as they investigate the possibility of valuable media and, in particular, content provided by improved experience to support customers with a more intuitive interface and a more enriching experience.

The task of technical opportunities in CM is as an interdisciplinary study area that examines the interconnectedness of folks, institutions, info and technology in the course of crises (Palen et cetera, 2020).

Despite the fact that most of the respondents in our survey acknowledged the value of crisis communications technologies, there had been a lack of awareness of and participation within those crisis uses (Zhang et cetera, 2020). However, the findings also underscore the role of neighborhoods organizations in providing access to crisis informatics technologies (Comes et al., 2019).

To our expertise, there has been actually marginal function in the CM domain name that pays attention to details populaces that are more prone, and have distinguishing demands and viewpoints networked TU (Zhang et cetera, 2020).

Their research demonstrated the value of examining the impact of age, situation, loved one illness, handicap, and technological access on emergency notification needs and inclinations (Zhang et cetera, 2020).

Organizations have already been dealing with more crises in recent years, but there has genuinely been a substantial improvement in how problems are perceived in the field of crisis management as a result of associations' extensive research into effective ways to deal with these issues (Merendino & Sarens, 2020).

The duty of technological possibilities in CM is as an interdisciplinary study area that examines the interconnectedness of individuals, associations, relevant information and technology during the course of problems (Palen et al., 2020). Although most of the people in our survey were aware about the importance of crisis internet technologies, there was a lack of awareness of and contact with some of these crisis apps (Zhang et al., 2020).

2.6.6 Crisis Management

A crisis can be defined as just an uncommon outside occurrence that causes tension, anarchy, risk, and tragedy (Cornia, 2019). As a result, CM is defined as the art and technology of controlling and mitigating the detrimental effect of a crisis event while using insufficient budget and working within strict time constraints (Parker et al., 2020).

Earlier researchers claimed that there are various effective factors to manage or contain crises (Ritchie & Jiang, 2019). These include social media usage, strong

communication with external parties (Men et al., 2020). Supporting the stance of CA and readiness to contain any potential, the crises early detection (awareness) corresponding, and the ready-made plans significantly influence CM and survival (Varma, 2019).

Additionally, insufficient crisis management, untrained and unethical partners, lack of supervision, bad overall look, and economical disagreements are the primary causes of crises when carrying out a megaproject (Ryder et al., 2017).

In the analysis of the importance of these factors on crisis management, Wang & Pitsis (2019) deduced that lack of understanding of megaproject crises is the lack of awareness in managing said crises. Such as raising awareness of potential issues was suggested by Wang & Pitsis (2019) as one of how crises can be managed. From the above paragraphs, it can, therefore, be conceptually concluded that to manage crises effectively and efficiently, organizations must be aware of the potential crises or the cues that might be alarming the organization about anomalies or unprecedented crises that is liable to occur.

Effective CM depends on superior communication that indicates centering on control, awareness, and response (Williams et al., 2017). The airport security, first responders, and various security authorities handle along with situations on a normal manner, these staffs cannot afford to be actually blindsided, as communication breakdowns can put whole purposes and individual lives at risk (Seville, 2016).

To place a prompt response, these groups need to have greater than an initial game plan they need to have communication tools that allow all of them to fulfill the three important CM aspects that all objectives share: awareness, response, and control (Perritt & Sprague, 2016).

The scientific and commercial progression of the western side world has triggered a danger society, because of the development of a 'brand-new size' of threats, culture presents a threat on itself and on future generations (Campbell et cetera, 2020). The protection CM in current society is actually characterized by issues of uncontrollability and responsibility, because airport terminals often give threats that reach past condition borders (Groot, 2016).

When residing in the closeness of flight terminals activities or even in the case of this research an airport, human beings are (commonly automatically) had an effect on through the dangers of possible catastrophes or crises (Serabian, 2006). When making an effort to stop calamities, it is essential to comprehend how crises or catastrophes occur (McCaffrey et al., 2020).

The timeless response is to criticize the responsible authorization or official accountability in the consequences of a disaster or crisis, as reveals in the traditional 'individual technique' as one of the complications in human fallibility (Groot, 2016). The safety and security and CM can only be actually studied and managed when strategy, human practices and business elements get sufficient focus (Bongiovanni & Newton, 2019). The organisational failure can easily exist for years or even months and ultimately lead to a tragic occasion (Newman & Bird, 2017).

In addition, the slams the event-centred technique to crisis management; according to his strategy dilemmas have a silver lining as they likely expose company flaws that otherwise will have continued to be unseen (Groot, 2016). Not either human- nor business inaccuracy clarify disasters; the complexity and strict coupling of devices create procedures hard to lead and control to calamities (McFarlane, 2020).

Furthermore, besides all efforts to prevent a disaster coming from occurring, the crisis that one thing goes extremely incorrect always exists (Kelman, 2020). The acknowledged the effectiveness of dangers and argued for a strategy of apprehension and strength, this means you anticipate on the indication of common troubles through using prebuilt plans, or you behave resistant towards complications that are vague or even unfamiliar by utilizing a combination of adaptability and variety (Marshall et cetera, 2020).

The institutions that characterize high reliability through properly staying away from catastrophes in an environment where ordinary accidents could be anticipated due to crisis elements and complexity. (Bongiovanni & Newton, 2019). As presently mentioned, teams are upheld be of vital value within emergency situation scenarios, and surveillance CM crew are utilized by a lot of organizations as a means of guaranteeing that the problems generated by significant activities are successfully managed (Knight, 2019).

Security CM group vital factor below is that the needs of such celebrations are located on a different collection of standards to those operative for a steady-state, core-business environment (Junttila et al., 2020). Such distinctions are substantial sufficient

to warrant a positive strategy by organizations to the option of safety CM staff (Williams et cetera, 2017).

In particular, it is actually contained listed here that such a choice procedure ought to think about both the relationship in between individuality and job and the general communication of the protection CM crew (Knight, 2019). Subsequently, the skill sets of those individuals decided on for safety CM team subscription should mirror those demands which are related to the organization's collection of potential situations (Coombs, 2014).

It is actually both the selection and intensity of the prospective problems that require to inform the layout procedure for surveillance CM crew (Samra et cetera, 2019). This sound, and the ability of supervisors to function within such uncertainty, are going to possess a notable effect on the performance of the security CM team as a decision-making physical body (French et cetera, 2019). Prior to checking out the characteristics of decision-making under problems of crisis, it is very important to specify the parameters of the term's 'crisis' itself (Head, 2019).

Despite the increase in the use of technology throughout the business, the receptive changeover is anticipated in the implementation of the value chain of a firm is insufficient (Olsson et al. 2013). There are still early adopters of technology using it for EC, even in developed and technologically advanced nations (Tutunea 2013).

There is a pressing need to learn more about this subject. Although the industry is estimated to be worth over $200 billion (Hyman 2013), research in this area is

minuscule compared to other fields such as information systems. There is a lot of research done on the technical side of technological adoption but behavioural aspects, which are more naturally the domain of IS research, are also being studied.

According to a few studies, a much higher percentage of customers became devoted to a shopping practice that used technology rather than a standard EC website, proving the behavioural aspects of customers (Huang & Tseng 2015). There are only a few quantifiable experimental studies on the subject, and the majority of them focus solely on consumer behaviour.

While EC firms have a generally positive attitude toward technology, the adoption of augmented reality is only marginal. There hasn't been enough research done on how companies are adopting augmented reality. While current research on adoption factors from the consumer's point of view can work as a starting position for the study, it is essential to study the particular perspectives associated from the SME's point of view. Because of the enormous potential for augmented reality in the ecommerce sector and the low adoption rate of EC firms, the primary goal of this research is to determine what factors influence EC firms' adoption intentions for augmented reality. This critical theoretical and managerial need underpins all of our work. A firm's perspective on modalities shows that they differ in terms of managerial and organisational factors as well as technological, environmental, and individual ones, and this merits further investigation.

The celebrations that will generally be linked with a crisis, it is necessary to take note that there is still no uniformly accepted meaning of the safety CM staff (Sennewald &

Baillie, 2020). The organizationally based calamities, which trigger significant damages and social interruption, include several stakeholders, and evolve via complicated technological, company and social methods (Hällgren et al., 2018).

The potentials of people to handle such changes, and the possible influence that boosted worry amounts may have on the common sense of choice creators, are problems that require to be dealt with within the growth of protection CM team (Boin et cetera, 2016). Even with a substantial number of high-profile celebrations, the importance of protection CM staff within the broader method of CM has actually brought in fairly little bit of interest in the literary works (Kuipers & Swinkels, 2019). Complying with on coming from the influential work which determined a schedule for analysis into the layout of safety and security CM crew, the majority of subsequent work has actually checked out the standard concerns relating to organizational layout and control within high-reliability organizations (Drennan et al., 2014).

CM plan is actually unpredicted and erratic activities (Wang & Pitsis, 2019). Urgent response CM strategy s for the particular departments accountable at International Airport Corporation prepared the dilemmas (Kim et al., 2019).

CM planning central control system to team up company-wide actions and countermeasures (Sennewald & Baillie, 2020). We have listed up possible risks at international airport, and have drawn up an organization continuity program (BCP) to make certain the constancy of our procedures as a strongly vital social structure (Sartwell, 2020). The continuity plan lays out ahead of time the methods and suggests where a service facility can easily decrease the damages to monitoring sources,

consisting of the lifestyles of its own workers and its resources, in the event of a significant calamity (Powell, 2020).

While CM plan making certain the extension of important company tasks to become sustained under ordinary circumstances and also those priority duties just in case of urgent, to ensure key tasks can be continual and normal functions restored as rapidly as achievable (Chepkoit, 2017).

Because of the quick nature of calamities, a detailed prep work of a CM strategy need to be actually carried out under typical health conditions to preserve a service throughout a calamity and rejuvenate it back to regular as rapidly as possible (Shafaie et cetera, 2019).

The CM plan during the course of a primary catastrophe such as an earthquake, airport terminals must accept their social task as calamity comfort centers taking care of assistance from other nations, suiting stuck vacationers and, depending upon the scenario, functioning as a discharge home for local area citizens (Davutoğlu, 2020).
In the event of domestic and worldwide pandemics when airport personnel have actually been infected and are incapable to function, flight terminals need to still continue to work as a vital social infrastructure (Johanis, 2007).

The international airport have built a CM strategy in service connection program to place specifically for quakes and for pandemics (Beirman, 2018). The CM program at an airport is actually not an isolated firm attempt maintaining the business of airport function have to be considered a national and social mission (Mijović et cetera, 2019).

The CM policies and procedures blending of network and ordered types has actually ended up being a matter of official plan in CM (Moynihan, 2008). Some urgents are recurring and predictable sufficient that it makes good sense to possess an institution that concentrates on taking care of them, development in the airport like folks has material certainly not permit remaining in the airport. (Van de et al., 2008).

Nonetheless, other urgents are actually asymmetrical, attending such scarcity, changability and range that it is not feasible for any sort of singular company to respond to all of them (Alexander, 2017). Such the CM plans and techniques consist of any type of events of nationwide implication, including bioterror or even atomic threats, or natural ultra-catastrophes (Moynihan, 2005).

Preparing for asymmetrical emergency situations is actually the work of the Department of Homeland Security delivers nationwide criteria and guidelines for organizing in response to dilemmas in the international airport (Ferris, 2019). The CM plans and procedures thinks that any significant incident is going to require a network of responders coming from different amounts of government, and also from the personal and charitable industries, and also such networks could be ideal managed along with hierarchical levels of authority (Aminizade et al., 2017).

The control and control come in the kind of the Incident command system is actually an ordered method of coordinating crucial administration bodies needed in an urgent: preparing, procedures, logistics, and administration/finance (Carmicheal, 2016). So, in the CM policies and methods each nation has exclusive intended to safeguard the crisis in various type (Boin et al., 2016).

It is actually both the range and severity of the potential dilemmas that need to update the layout procedure for safety and security CM team (Samra et al., 2019). The occasions that would normally be actually associated with a crisis, it is actually crucial to take note that there is actually still no evenly accepted meaning of the protection CM staff (Sennewald & Baillie, 2020).

Regardless of a sizable number of top-level activities, the importance of protection CM team within the broader method of CM has enticed pretty little focus in the literary works (Kuipers & Swinkels, 2019). Emergency situation response CM strategy s for the corresponding teams in command at International Airport Corporation attracted up the dilemmas (Kim et al., 2019). The CM policies and methods blending of system and ordered types has ended up being a concern of professional policy in CM (Moynihan, 2008).

2.7 Underpinning Theory

There are several models developed to effectively and efficiently manage crisis, for example the model developed by Gonzalez et al. (1996), that deals with communicating CRE to contain or manage crisis events after it has already happened. Similarly, the model to manage crisis proposed by Maximillian (2016), also focuses on crisis events.

Similarly, there another model of stealing thunder by Arpan and Ewoldsen (2005), the purpose of this model is to deal with crisis aftermath. However, the nature of this study is to proactively prepare to manage potential crisis that is averting crisis and not facing such crisis. Considering this, the researcher two theories as the following.

2.7.1 Situational Crisis control Theory (SCCT)

According to the Coombs & Holladay's (2002), indicated that, the SCCT is actually one device that may be used throughout the recuperation period. It says that stakeholders regard the association and the crisis based on whom they view to become in charge of the activities (Coombs & Holladay, 2002, Coombs, 2004).

Therefore, organisations may attempt to protect their image and legitimacy by reducing investors' perceptions of the organisation's responsibility for the events (Stephens et al., 2005; Coombs & Holladay, 2002, Coombs, 2004). The form of the ceremony is the most important factor that stakeholders evaluate when determining their perception of the firm's responsibility for the ceremony (Guerber et cetera, 2019). SCCT If the occasion is actually one which the association can control, including one induced purposefully or through human inaccuracy, stakeholders are going to have a bad perception of the celebration (Coombs, 2007).

Shareholders will simply assign predetermined responsibility for the incident if the situation is one that the organisation could not have totally controlled, such as professional failures or even collisions (Hansson & Vikström, 2010). Shareholders might view the firm as a threat too and respond with compassion and devotion if the SCCT was fully out of the authority of the project manager (Coombs & Holladay, 2002; Coombs, 2004; McDonald et cetera, 2010).

In addition to the action's causative nature, a number of other factors may increase the stakeholder's sense of obligation toward the company during the event (Schwarz, 2008). Companies suffer far more damages to their reputations if they have a history

of crises, as problems are then perceived as fairly constant processes associated to the company (Kim, 2014).

Furthermore, SCCT says that if the crisis is severe, it will result in further harm to the business (Coombs, 2007). Poor stockholder connections will also have an impact on how the crisis is perceived, since they may be a sign of a lack of skills across the board (Hansson & Vikström, 2010).

What notifications methods are actually the most appropriate for the organisation to utilise in its CC will be determined by SCCT these considerations (Coombs, 2007). If the organization wants to get the most out of its very own notifications techniques, it must adapt them to the scope of the issue, the reasons of the crisis, and the agency's current reputation and image (Brown, 2014).

In situations when there are no other factors, organisations are actually more likely to employ safety precautions such making up justifications, disputing the crises' existence or severity, portraying the associate as prey, and informing stakeholders of the organization's prior successes (Guerber et cetera, 2019).

Organizations must accept responsibility for disasters that were truly caused by deliberate actions or human error, apologise, and promise to take corrective action (Dulaney & Gunn, 2017). By using messages with more fulfilling qualities, the SCCT demonstrates that the organisation accepts responsibility for the activity, which results in positive stakeholder actions (Barbe & Gray, 2018).

Brokers are frequently encouraged to assume no or very little responsibility for the activity by the company's legal representation because taking responsibility for the SCCT could result in legal consequences (Wright, 2008). Although the SCCT may be a safe alternative, taking responsibility has many benefits (Brown et cetera, 2019).

Accepting responsibility results in cheaper settlements, a significantly improved internet reputation, and more support for the organization (Lai, 2010). Some businesses have historically been very reluctant to discuss pertinent details about the festivities, what the threat of the festivities occurring was, and what steps have been taken to address the situation due to the concern that accepting work in CC could have negative consequences from stakeholders (Kim, 2017).

If the event occurred completely out of the agency's control, shareholders can view the organisation to be a victim also and react with sympathy and commitment (Coombs & Holladay, 2002; Coombs, 2004; McDonald et al., 2010).

Organizations suffer even greater harm to its internet presence if the institution has a history of incidents, as the incidents are then viewed as being reasonably reliable events related to the corporation (Kim, 2014). If the company wants to get the most benefits out of its notification strategies, it must adapt each one to the seriousness of the problem, the causes of the crisis, and its current reputation and reliability (Brown, 2014).

Organizations are actually most likely to use defensive tactics in SCCT for occurrences when there are no factors, such as providing justifications, disputing the crisis'

existence or severity, posing as an aim on behalf of the organisation, and reminding stockholders of the institution's prior achievements (Guerber et al., 2019).

2.7.2 Common Alerting Protocol (CAP)

CAP is a program developed to gather and send out information automatically and promptly on all types of potential crises. Developed in the year 2000 by group of 120 emergency and crisis experts around the world, this program analyzes several data available and predicts what is possible to happen and the simplest what to deal with the potential event.

The idea behind this program fits perfectly well to this research context that is, awareness creation by gathering intelligence or cues about the potential crisis, in this case, potential crisis by drones and relaying how the potential crisis can be contained or managed even right before it happens that is, crisis aversion. Also, this program according to the Committee on Environment and Natural Resources of the Science & technology Cabinet NSTCCENNR (2000), uses several channels such as emergency alert system (EAS), the universally coded digital warning, radio broadcast data system (RBDS) to relay the analyzed data so that the party involved in CM can make at least accurate preparations to averse the potential crisis.

The CAP model of averting crisis had been reported globally to be an effective approach in dealing with potential crisis. For example, in Australia, the CAP model had been adopted by the Australian government and ever since then, the government agencies had been working tirelessly to enhance the effectiveness.

Also, this model was adopted by the fire service in Italy, Canada, Germany and the United State of America (Cameron, Power, Robinson & Yin, 2012; Chiah, Chai, Zhong & Li, 2016; Seetaram, 2010).

2.8 Research Framework and Hypothesis

The relationships between exogenous (such as CA and CRS) and endogenous variables are shown in Figure 2.3. According to previous research conducted in various contexts and using different research approaches, the variables under investigation have a significant relationship to CM. (Appelbaum et al., 2012; Watkins & Bazerman, 2003; Waryjas, 1999).

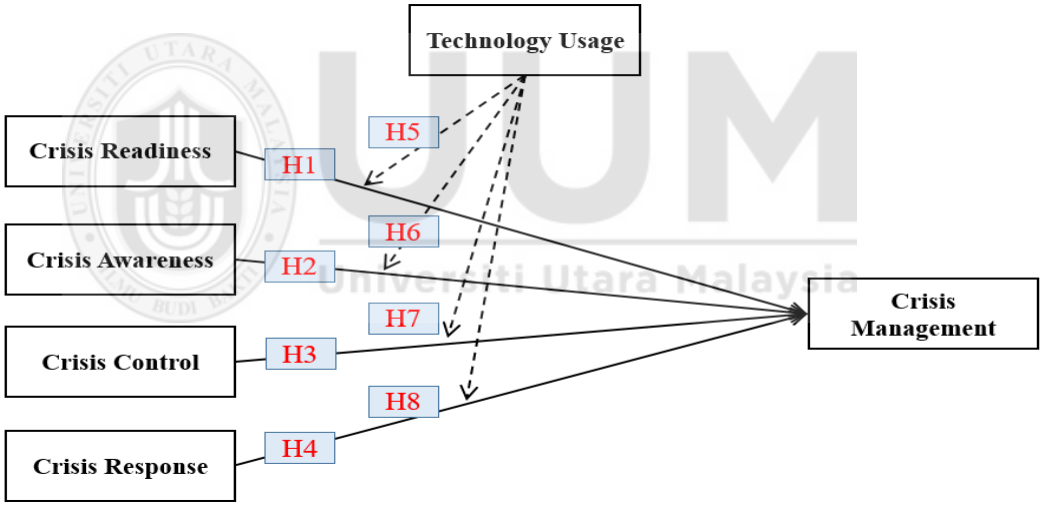

Figure 2. 4 Research Framework and Hypothesis

2.8.1 Crisis Readiness and Crisis Management

It's crucial to understand that a crisis could happen at any time and have a variety of repercussions on people, groups, organizations, and entire civilizations, depending on how it's handled. In contrast, crisis readiness refers to a company's treatments, plans,

and operations, all of which are designed to ensure that the company is always ready to deal with any given situation (Bowen et al., 2018; Thapa et al., 2017).

Contrarily, CM is the method by which an organization responds to a sudden, tumultuous incident that promises to hurt the company or its shareholders (Bryan et al., 2018; Van de Walle et al., 2016).

Numerous studies have identified that crisis preparedness would then assist to confront the issues that arise from every crises but it will also assist to be prepared for any situation that could occur, and will contribute to a greater CM of drone threats in DIA (Jahng & Hong, 2017; Kriyantono & McKenna, 2019; Nguyen et al., 2016; Savonen et al., 2018; Wang & Kuo 2017). (Claeys & Coombs, 2020; Jahng & Hong, 2017; Kriyantono & McKenna, 2019; Qadir et al., 2016). Because of this, the researcher thinks crisis preparation will significantly improve the DIA's ability to control the threat posed by drones (CM).

It is in line with other theories put out in the literature, including those of (Bodó et al., 2017; Brancaccio et al., 2019; Bryan et al., 2017; Desai et al., 2020; Janssen & van der Voort, 2020).

- The first hypothesis holds that CRS has a favourable, considerable impact on CM of drone threats in DIA.

2.8.2 Crisis Awareness (CA) and Crisis Management (CM)

CA gives its customers a competitive edge by utilising the most recent knowledge of what influences crisis communication preparedness and how firms may manage an

effective response (Hymeniuk & Melnychuk, 2017; Janssen & van der Voort, 2020). Training is required for staff members who maintain corporate operations in the event of a crisis or disruption (Basiry & Ghasem-Aghaee, 2016; Hymeniuk & Melnychuk, 2017).

CM is focused on assessing risks to a business and its stakeholders, as well as the methods the firm uses to manage these risks (Czerniak et al., 2016; Kostyuchenko et al., 2018). A CM plan is typically created by organisations to lessen uncertain results in emergency situations (Mason et al., 2018; Rothkrantz & Fitrianie, 2018).

Numerous researches have discovered that CA aids in gaining a better knowledge of any issue or crisis that a business may have as well as aids in resolving it, which will result in a better CM of drone risks in DIA (Basiry & Ghasem-Aghaaee, 2016; Czerniak et al., 2016; Rothkrantz & Fitriane, 2018; Ruquan, 2017; Xinquan, 2016). (Mason et al., 2018; Ruquan, 2017; Humanson & Nordeman, 2017).

Given this, the researcher is of the opinion that CA will significantly improve the CM of drone threats at DIA. Additional hypotheses that support and are compatible with this one includes (Bacon et al., 2017; Heide & Simonsson, 2019; Hengartner, 2018; Shi & Li, 2020; Tapia & Ayarza).

- Hypothesis 2: There is a positive significant influence from CA on CM of Drones threats in DIA.

2.8.3 Crisis Control and Crisis Management

A issue is something that causes an unstable and dangerous condition for an individual, a group, a community, or the entire society, as was previously stated (Nizamidou & Vouzas, 2020; Zade et al., 2018). CC is a technique that will surely be employed in times of crisis to keep it under control, well-maintained, and stop it from growing ever greater (Cutri et al., 2020; Schrader & Laaser, 2019a).

CM, on the other hand, entails creating and implementing strategies to assist an organisation in reducing the effects of an unplanned incident on service (Schrader & Laaser, 2019b; Stevens, 2017). Several studies have discovered that CC maintains a company moving the crisis to resolution and conquering it since it helps to identify all aspects of the crisis and how to start mending the issues that the businesses confront (Ang et al., 2020; KAYAOGLU & Williams, 2020; Sezgin et al., 2020; Stevens, 2017).

As a result, the drone danger at the airport terminal in Dubai will be better controlled (Al-Zaqeba, 2019; Schrader & Laaser, 2019a; Sezgin et al., 2020). As a result of this research, CC is anticipated to directly and significantly improve the CM of drone threats at DIA. Other hypotheses, like those proposed by Ang et al. in 2020, Cutri et al. in 2020, KAYAOGLU & Williams in 2020, Schrader & Laaser in 2019b, 2019a, Sezgin et al. in 2020, and Stevens in 2017 are congruent with and compatible with this theory).

- Hypothesis 3: There is a positive significant influence from CC on CM of Drones threats in DIA.

2.8.4 Crisis Response (CRE) and Crisis Management (CM)

CRE outlines the innovative thinking and need to for all tragedies, crises, crucial happenings, and unpleasant events, both natural and man-made.

The quicker the response is, the less damage is done (Jordana & TrivioSalazar, 2020; Malyshev et al., 2018). That after crisis occurs, CRE is what surveillance says and does, according to (Bowen et al., 2018; Thapa et al., 2017). CM is also the process of planning for and handling any unforeseen or tumultuous emergency situations that have an influence on the company or firm (Bowen et al., 2018; Bryan et al., 2018; Jahng & Hong, 2017; Kim & Park, 2017; Van de Walle et al., 2016).

As a consequence, and in line with the findings of different scholars, such as (Bryan et al., 2018; Jordana & TrivioSalazar, 2020; Kriyantono & McKenna, 2019; Savonen et al., 2018; Wang & Kuo, 2017), CRE will aid in fixing problems that emerge as a consequence of crises and will inhibit catastrophes from expanding bigger and larger, consequently results in an improved CM (Brancaccio et al., 2019; Desai et al., 2020; Hymeniuk & Melnychuk, 2017; Kriyantono & McKenna, 2019; Nguyen et al., 2016; Qadir et al., 2016). Based on this, the researcher anticipates that CRE will have a considerable good effect on the CM's drone threats at the airport area of DIA.

Additionally, it is in accordance with other theories from research by Basiry and Ghasem-Aghaee (2016), Bodó and Ghasem-Aghaee (2017), Czerniak and Ghasem-Aghaee (2016), Bryan and Ghasem-Aghaee (2017), and Bryan and Ghasem-Aghaee (2018), as well as Bryan and Ghasem.-A.

- Hypothesis 4: There is a positive significant influence from CRE on CM of Drones threats in DIA.

2.8.5 Technology usage as a Moderator in the Relations from CM Factors

The broadest definition of technologies is objects, both tangible and intangible, that are produced by the application of physically and mentally effort to provide some sort of value (Chiauzzi & Newell, 2019; Offermann-van Heek & Ziefle, 2019).

Technologies here refers to gadgets and machinery that can be helpful in resolving issues in the physical universe. CM, in contrast side, focuses on identifying vulnerabilities to a firm and its stakeholders along with the strategies the business uses to counter those threats (Amade et al., 2018; Upadhyay et al., 2018). In the case of a crisis, organisations often create a CM strategy to eliminate ambiguity (Kim & Park, 2017; Malyshev et al., 2018).

Even so, as stated in the preceding hypotheses, every independent variable is anticipated to directly improve crisis management. According to different scholars, including Bowen et al. (2018), Claeys & Coombs (2010), Jahng & Hong (2017), Jordana & Trivio Salazar (2010), Khairuddin et al. (2016), Savonen et al. (2018), and Upadhyay et al (Bruwer, 2016; Bruwer et al., 2018; Hashemy et al., 2016; Mwakaje, 2018; Seko et al., 2017).

As a consequence, the authors confirm that TU will have a highly favourable direct moderating impact on the association between the investigated factors and crisis management.

In many other research, like from; this hypothesis is also supported by other theories (Allen et al., 2016; Fariz et al., 2016; Hersona & Sidharta, 2017; Hitt & Tambe, 2016; Kheng & Muthuveloo, 2019; Kiatsuranon & Suwunnamek, 2017; Laury, 2019; Lee et al., 2016; J. J. Li et al., 2017; X. Li, 2020; Muhammedrisaevna et al., 2020; NGOMA, 2018; Syamsir, 2020; Wahab et al., 2020; Wardani, 2019; Wijermans et al., 2016; Yun & Yoo, 2017).

- Hypothesis 5: TU has a moderating impact in the relationship between crisis readiness and CM of Drones threats in DIA.
- Hypothesis 6: TU has a moderating impact in the relationship between CA and CM of Drones threats in DIA.
- Hypothesis 7: TU has a moderating impact in the relationship between CC and CM of Drones threats in DIA.
- Hypothesis 8: TU has a moderating impact in the relationship between CRE and CM of Drones threats in DIA.

2.9 Summary

Since its opening in 1960, DIA has really served over 402,000 travelers, with a yearly project budget of 15.5%. (along with one million passengers in 1974, five million in 1990, and 10 million in 1999). It dealt over 17.9 thousand tonnes of total cargo capacity and about 3.87 thousand airplane activities (12.4% yearly growth rate) on an annual basis. As part of ongoing construction, the airport acquired a brand-new terminal (the Sheikh Rashid Terminal) in 2000, increasing its annual capacity to 23,000 passengers. Additionally, as a result of expansion, freight traffic continued to increase, including over 20,000 visitors in 2004 and 34,000 throughout 2007. DIA hosted 89.1 million

visitors in 2018, exceeding its own projections while continuing to be the busiest airport in the world for foreign visitors.

There are advantages and disadvantages to the use of autonomous aerial vehicles, or drones, in airports around the world. The benefits, however, include money generating for air traffic management. Other potential made possible by drones in airports include the chance for private sector entrepreneurs operating on airport property to run a commercial spaceport where passengers can be transported by drones to neighbouring areas.

The city-state of Dubai is well renowned for its reliance on technology. The airport would've been security requirements using cutting-edge technology as a result, but given the circumstances, complete security could be assured.

By 2020, according to the UAE Ministry of the Interior, immigration law enforcement officers won't be required there since an automation process would take their place. Artificial intelligence's objective is to have people pass through a security system that uses AI to be examined without removing their belts, sneakers, or emptying their wallets.

Nevertheless, a virtual underwater smart gate is currently being tested by Dubai International airport Artificial Intelligence (King, 2019). One industry with a high likelihood of facing a crisis anywhere at particular time is the aircraft industry. Research claims that the industry has experienced numerous assaults over the years,

including a terrorist attack, drone issues, and economic and political problems that have had an impact on its activities and duties.

This specific research looks at the airfield service, crisis readiness, CA, CC, and CRE aspects of handling drone issues in the UAE. Within the UAE Airport, tolerance is relative to effectiveness. To successfully and efficiently handle crises, various models have been established. One such approach focuses on using CRE to contain or manage crisis situations after they have already occurred. Nevertheless, this study's focus is on proactive crisis management, or preventing crises rather than dealing with them.

CHAPTER THREE

RESEACRCH METHODOLOGY

3.1 Introduction

Research is the understanding of current knowledge and the utilization of prior data in a novel and innovative approach so that additional insights, methodologies, and perceptions can be exhibited. The principal motive of this section is to manifest the fundamentals of the methodology utilized and the details of the research design of the study.

Amid different methodologies, the quantitative methodology was used in this thesis. This chapter concisely presents the methods that was used, the instruments that were applied in data gathering, the data collecting techniques, the field of the study and sampling techniques.

The fundamental purpose of this chapter is to provide the fundamental principles of applied methodology and aspects of study design. Quantitative approach would be employed in this research among several methodologies.

This chapter of the research briefly discuss the methods that will be incorporated, the instruments that would be employed in data collection, the data collection techniques, the area of the study, and sampling methods. The methods used in data analysis for

conducting this research are briefly presented below. The methodology which was applied is stated concisely below.

3.2 Research Philosophies

It is critical that the researcher comprehend the research philosophies since this adds to research originality and hence improves research quality (Easterby-Smith, Thorpe & Jackson, 2012). Knowledge of epistemology and ontology, according to this viewpoint, is crucial in addressing research perspectives.

This is because the type of information to receive, how to obtain and analyze data, the conclusions to be carefully analyzed, and the level of generalising of study results are all influenced by the study's theoretical and philosophical perspectives. According to Easterby-Smith et al. (2012), knowing aspects of the study helps the researcher choose and define the best procedures for the specific study topic.

This include locating the datasets, determining the kind of data selected for the research, replying to the answers given forth, the form of the necessary analyses, and truly understand.

Acquiring understanding of the research paradigms is the second component, which permits the researcher to foresee probable study constraints associated with the effectively help. Identifying the ideal research model is crucial, as noted by Easterby-Smith et al. (2012) and Easterby-Smith (1997). This will enable the researcher to choose and use approaches that are foreign to them with more innovation and inventiveness.

Ontology, however, differ from one another. Holden and Lynch (2004) defined ontology as a person's worldview, regardless of whether an objective reality exists or a subjective reality that has been created in the person's mind. Ontology, in contrast side, is focused on the act of determining the essence of truth as it currently exists in the world (Easterby-Smith et al., 2012).

Because of this, Holden and Lynch (2004) described research paradigms as groups of theories, presumptions, or viewpoints that researchers employ to study and understand a phenomenon. According to Easterby-Smith et al. (2012), Holden and Lynch (2004), and Polit et al. (2001), there are 3 distinct types of study frameworks: I positivist, II conceptualism or interpretive, and III realist.

According to the romanticism school of thought, positivists were founded on a realistic metaphysics that noticed and quantitatively measured things. The characteristics of a positivist, according to Easterby-Smith et al. (2012), include the researcher's independence from the investigation, the absence of partiality due to human involvement, the necessity of a causal relation, the existence of tax rebate and assumptions in the studies, the the need that the analysis unit be lowered to the purest sense, and hypothesis verification.

Furthermore, sophists, according to Holden and Lynch (2004) and Sekaran and Bougie (2013), are more focused with the validity and reproducibility of their work as well as the accuracy of observations and the ability to generalize the findings.

to accomplish the objective of the current study, which is to investigate the strong correlation among CA and readiness for crisis management. As a result, for the stated reasons subsequently, which were highlighted above and explained below, this study corresponds to the positivist research paradigm or philosophy.

The first argument in favour of keeping to the positivist paradigm was that the purpose of this investigation was to confirm established hypotheses rather than to generate new ones. Testable hypothese are also derived from the framework based on accepted theories and models.

The chief factor was that the factor analyzed in this research had already been empirically investigated in earlier studies, namely in various circumstances and with various crisis management techniques. As a result, this study takes a step further by outlining the specifics of the relationship that develops between these elements under different conditions. In other words, the study makes an effort to support the accepted hypothesis through data analysis using survey research techniques.

3.3 Research Design

According to Kumar et al. (2013), a research design is the outline of an inquiry that outlines the steps a researcher must take to accomplish the probable study objectives. Similar to this definition, Johar et al. (2005), Kumar et al. (2013), and Sekaran & Bougie (2013) described research design as a strategy outlining how data might be gathered and evaluated with the goal of answering the study's research objectives.

Barnes, Grove and Burns (2003) describe a research design as an outline for directing research with full power over aspects impacting the results ’validity and reliability.

As a common design it is regarding what to do and as purpose of research study it is outlined as an optimal of precise technique of data collection and analysis to answer research question more importantly research design should include strategies and method related with nature of the data and its collection technique, sampling methodology, the budget & time framework & data analysis‖ (Pride & Ferrell, 2007). The goal of a data collection tool, according to Ezeani (1998), is to gather accurate and thorough data that describes a serious phenomenon. This study will employ a quantitative approach to gather data, which will give researchers a solid understanding of the issues at hand. The purpose of this research is to examine the moderating role of TU in the link among CRE, CA, CC, CRS, and CM.

This study's main goal is to develop a comprehensive framework for crisis management inside the United Arab Emirates by analysing how it affects constructs, such as skill development, dissemination of knowledge, seamless performance outcomes, and the ability to handle numerous uncertainties with snap decisions.

In order to meet the demands of the current day, it is crucial for small and medium-sized businesses to have a data system that is well-constructed and also well.

The original study design is particularly essential since it helps clarify and describe the genuine issues that exist now and have been in the history in order to determine the effects of the adoption of e-commerce. The methodology includes sampling questionnaire surveys.

In summary, research design refers to an overview of the methodological decisions made in a research effort. To summarise the perceived significance of awareness in this study and readiness to proactively manage drone crisis in Dubai airport, a quantitative methodological approach is employed.

3.4 Challenges of the Research Design

Research is focused on quantitative sampling techniques and researchers seek to gather data from the upper and middle management of the Dubai airport. Collection of a valuable data set from the different department was a challenging task to which researchers had to comply with greater care and vigilance.

First, it was a long process to take assent of the departments to get an access to the workforce for collection of data. Secondly, response rate was dejected and challenging for researchers as respondents have intricate duties and limited time availability for such ventures due to employment engagements assigned tasks and duties. Despite these hurdles, author tried his level best to handle these concerns to come up with the most reliable and unbiased results.

3.5 Scientific Approach

This study uses a scientific method to determine and define a problem, formulate a tentative hypothesis, and then confirm or disprove the hypothesis, except the explanation and conclusion of the results. Moreover, it is common to have a few distinct phases in this approach (Creswell, 2014; Jackson, 2015).

The analysis begins with the identification of the research problem. The major subject of this research is CA, CC, CRE, CRS, TU and its impact on CM, with the exception of the study experiences and investigator norm, which are used to help identify the topic.

Classifying the research topic comes next. Research work must be driven by knowledge gaps that help to define and frame the problem. Theories and practical shortcomings have been shown with the use of prior research, semi-formal recommendations from important experts, and trends supported by data.

In the third step, research objectives are explained, and the broad issue testimony is converted into functional goals that are then mapped to the study stages. The next step is to develop the theoretical and philosophical framework using literary sources.

Both the underlying theories and the essential concepts must be discussed. Understanding sampling and data collection techniques is the sixth step. The seventh step entails developing the study hypothesis and proposed model.

From the systematic literature review, the variable and associations are analyzed and generate the suggested model. The eighth action is constructing the questionnaire as well as examines validity and reliability. The ninth move is to collect information by utilizing suitable methods, ranging from immediate compilation to electronic compilation. The tenth move is Analyzing information by the ideal strategies & assessments.

The examination results are discussed on the many hypotheses, with the exception of a discussion of the successes or failures of the product and hypothesis, rather than the realisation (Creswell, 2014; Jackson, 2015).

3.6 Research Hypotheses

The study has 08 different hypotheses to represent the relationships in the proposed model. In this model the CM is the dependent variable, CA, CC, CRE and CRS are the independent variable with a moderator, named TU. The following is a list of the different hypotheses.

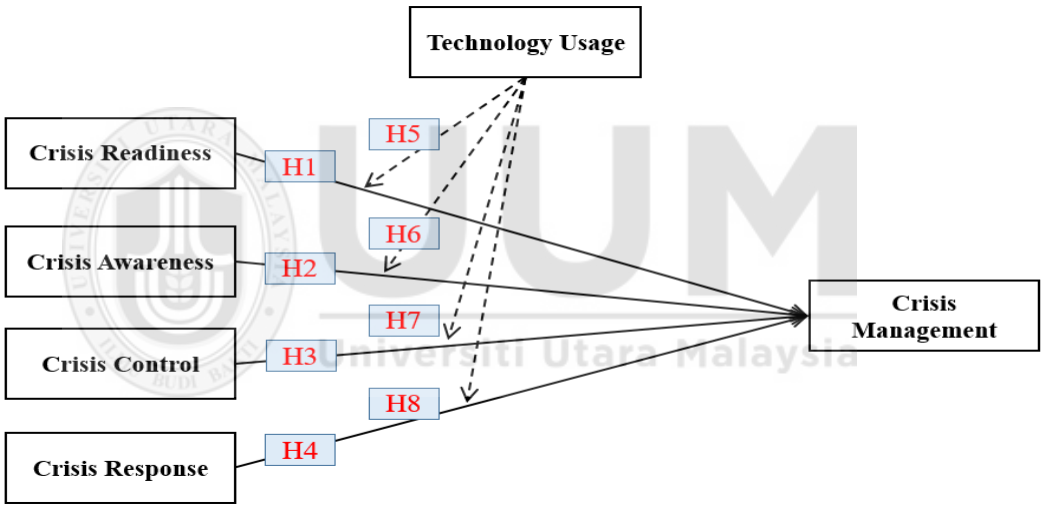

Figure 2. 5 List Of The Different Hypotheses

3.6.1 Hypothesis Details.

The statement of all hypotheses is given below:

H1: There is a positive significant influence from crisis readiness on CM of Drones threats in DIA.

H2: There is a positive significant influence from CA on CM of Drones threats in DIA.

H3: There is a positive significant influence from CC on CM of Drones threats in DIA.

H4: There is a positive significant influence from CRE on CM of Drones threats in DIA.

H5: TU has a moderating impact in the relationship between crisis readiness and CM of Drones threats in DIA.

H6: TU has a moderating impact in the relationship between CA and CM of Drones threats in DIA.

H7: TU has a moderating impact in the relationship between CC and CM of Drones threats in DIA.

H8: TU has a moderating impact in the relationship between CRE and CM of Drones threats in DIA.

3.7 Research Population, Sample Size, and Sampling technique

3.7.1 Research Population

Earlier scholars defined populace as the whole of the items or persons under investigation that share similar characteristics or quirks (Kothari, 2004; Riff, Lacy, & Fico, 2014; Ritchie, Lewis, Nicholls, & Ormston, 2013). These scholars contend that one of the important elements of a research effort through whom samples are chosen or chosen is the target respondents.

For the sake of selecting, the group is defined by Polit Beck & Hungler (1999; Brynard & Hanekom, 1997) as all the occurrences, occurrences, or people who are predetermined or conform to the original study environment and have an equal likelihood of being selected as a sample.

Additionally, Castillo's study (2009) divides a crowd into two categories: the people with a particular and the entire population. According to Castillo, targeted respondents are sizable groups of individuals or objects that scientists are looking to apply the results to (2009). The sample size, on the other hand, is the segment who can benefit from the research's results.

The sample size is a subgroup of the research population, to put it another way. Study subjects are chosen by researchers from the generally accessible community (Castillo, 2009). Using the aforementioned criteria, this study is focused on the overall amount of senior and junior workers working at the airport terminal in Dubai.

This is due to the fact that if crises continue, every person will be affected and they are crucial to crisis management.

3.7.2 Research Sample

According to Sekaran's definition from 2003, a sample is a subset of the population. While Kothari (2004) explains that samples are a crucial component that are carefully selected from the community for research purposes in a way that accurately represents the complete population.

Babbie (1998) and Hair et al. (2013) contend that choosing persons that are in the perfect situation to reflect the society is essential in order to examine an endless community, i.e., the study inhabitants that the researcher intended to investigate.

As a result, the study project will sample airport personnel in Dubai using power analysis on their perceived proactive measures in managing drone crisis if one happens.

3.7.3 Sample Size

The selection of study samples can be done in a number of ways. This includes—without being restricted to the well Krejice and Morgan (1975) sample estimate for categorical data, Cochran (1977) large sample prediction both for discrete and numerical data, and the employing of power test "G*power sampling software."

One of the limitations of these methods, with the exception of the use of G*power sample tools, is the need for a defined population (Cohen, 1988; Ramalu, 2010). since at the moment of collecting data for this study, the study did not have access to the full target group (the total number of employees both senior and junior staffs working at the DIA).

Consequently, it is advised to be using G*power program to determine the necessary sample size for the investigation. Although there are various methods for selecting a sample size, G*Power was used to determine the necessary sample size for this investigation for the reasons given below.

The benefits of using G*Power over other strategies for selecting sampling sizes include the ability to use effect size (f2), power (1-err prob), and (err prob) to determine sample size (Faul, Erdfelder, Buchner, & Lang, 2009; Faul, Erdfelder, Lang, & Buchner, 2007).

Additionally, a layout input mode and a dispersion input style that can calculate both centre and non-central predictions are supported by the interactive mode for statistical method. Additionally, performance evaluation can determine the sample size needed for a research project from an unlimited community if the investigator can select the right analysis for their study (Faul et al., 2009; Faul et al., 2007).

The very first massive goal of this research, which is to examine the significant influence of entrepreneurship development on students' entrepreneurial behavior and necessitates regression analysis, in addition to the final appropriate point, which is to examine difference in students' entrepreneurial behavior prior to and following the entrepreneurship education course, are consequently conferred.

The T-test is a suitable analysis to look at this. Given this, the "t-test - linear multiple regression" is selected for use in the G*power software testing. This led to the distribution of 138 samples as a sample. Below is an illustration of the input and output.

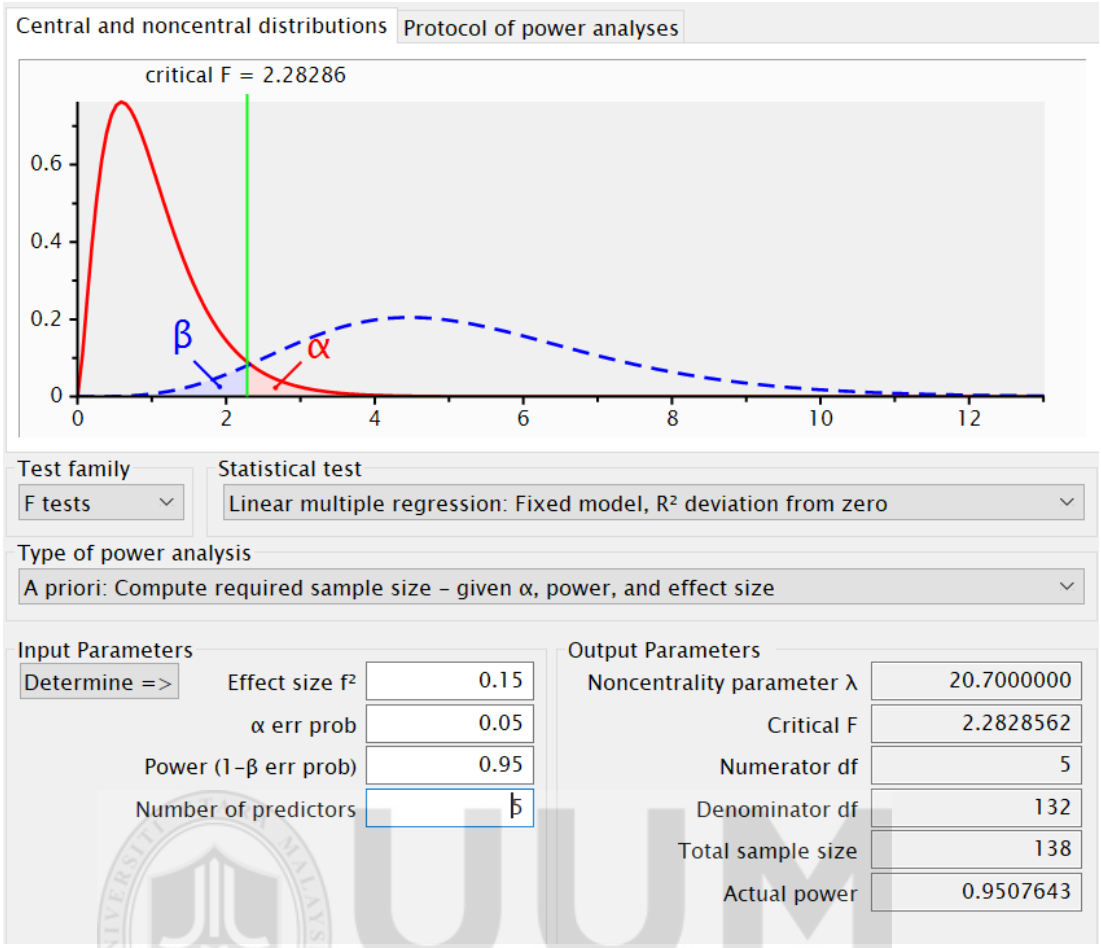

Figure 3. 1 Power Analysis output for sample size estimation

The samples suggested by the power analysis tools is an estimate. That is, it is suggested that a sample size of 138 is enough to conduct this survey. However, to avoid nonresponse bias, the research tends to increase the samples to 300. With this assumption, the research are going to distribute more than 400 questionnaire to secure that target of 300 valid questionnaire after data screening.

3.7.4 Sampling technique

DIA's entire senior and junior staff constitutes this study's target population or research participants. For sure there are thousands of working staff in the different airport operation but no published numbers.

In addition, the target sample size is 300 with the intention to distribute more than 400 printer questionnaires in a face-to-face collection approach. The questions is how we are going to select approximately 400 samples from the overall population? To answer this question the following facts must be illustrated.

- The size of the total population is not published for security reasons.
- There is full list of the population.
- All population members are allocated into one pool and there is no categories.
- The population is homogenous, and all samples are the same with no considered bias based on any sample's characteristics.
- The nationalities of the respondents are taken into consideration because local and expatriates may have different thinking on the issue.

Based on the above facts, any possible sample can be an acceptable participant; therefore, convenience sampling is the proper sampling technique for this particular study. In convenience sampling, at the time of data collection, the printed questionnaire can be distributed to any employees both senior and junior staffs working at the DIA. However, we should consider that the participation is voluntary, and the employee must agree to answer the survey.

3.8 Procedure for Data Collection

There are several methods a researcher may use to get the information needed for a study. These include but are not limited to observations, experiments (real experiment, quasi-experiments) surveys, and interviews.

An investigator chooses one or combines several of the most effective techniques to carry out his or her inquiry while considering the resources that are accessible (Creswell, 2009; Dimitrov & Rumrill Jr, 2003). This research follows the quantitative research approaches in which questionnaire is distributed to the respondents as it is done in most social science research (Galambos, 2019; Maxim, 1999; Tuli, 2010).

The research print out more than 400 questionnaire and get the permission to distribute it to the employees within one week time during December 2019. The technique used is direct collection in a face-to-face approach and distribution and data collection happened in one session. The researcher try his best to reach a diversity samples.

3.9 Data collection Instruments

There seem multiple ways for a scholar or detective to gather information for their research process from reliable and trustworthy sources, which information will then be analysed (Ary, Jacobs, Irvine & Walker, 2018).

Surveys, interviews, experiments, and discussions with focus groups are some of these techniques. The type of tools to be utilised, according to Fraenkel, Wallen, and Hyun (2011), solely depend on the research methodology and objectives of the study (Ary et al., 2018; Adeoye & Popoola, 2011).

Some scholars also think that openly accessible information from networks and annual reports ought to be used. This justification is offered due to the nature of the investigation and the accessibility of the necessary data (Kawamura, Watanabe, Sakanoue, Lee, Inoue & Odagawa, 2010).

As this study aims to explore the perspectives of those who are currently employed at the airport at the time the survey is conducted, such publically available data cannot be used in it.

To establish the validity and remove the common method bias all the employees working in selected enterprise were give equal chance of reporting their response. Although a cover letter containing all the necessary information regarding our study and reasons of data collection, was sent along with the questionnaire, but still a brief oral interpretation about the instrument designed was provided to the respondents in group.

Each of the respondent was requested to fill the questionnaire individually with due attention by sparing some time out of their busy routines. After collecting back, the filled questionnaires from the participants of the survey, questionnaire were carefully screened for missing values and unengaged responses and the ones with complete information's were further entered into software and data was then categorized, examined, summarized, analyzed, and presented in the thesis.

In this study, the selected sources, research samples, or individuals were queried in order to obtain pertinent data. According to Yaya (2014), adopting a questionnaire has benefits such as respondent confidentiality, the ability to gather massive amounts of data quickly, and cost effectiveness.

More precisely, Popoola (2011) listed a few characteristics of an effective questionnaire, such as the ability to have a definitive answer through straightforward

question design, questions that are focused on the specific topic of inquiry, and keeping the questions concise and precise (Aina, 2004).

The current study adapts tools from prior empirical studies in order to improve the instrument's validity and reliability (O'Sullivan, Rassel, & Berner, 2003). Using a 5-point Likert scale, elements are evaluated in this study. The Likert scale was developed with the following advantages of using them in mind, as suggested by past studies.

According to Losby and Wetmore (2012), there are several benefits to using a Likert scale, including the ability to create response categories, classifying participants' responses in a homogeneous order of "Strongly Disagree - Strongly Agree," and assigning a numerical value of "1 - 5" for a 5-point Likert scale to each response.

3.9.1 Items Measuring Crisis Management

The views, recommendations, findings, and inferences from the literatures analysed in chapters one and two served as the basis for the materials used in this study. This is done to make sure that the items that have been edited have proper content. Table 3.1 displays the elements that were changed based on the research, including (Rousaki & Alcott, 2006). A total of six components were developed to evaluate the crisis management framework.

Table 3. 1
Items measuring Crisis Management

#	**Items (7)**
1	Crisis personnel needs to have foresight about potential crises
2	To effectively manage drone crises, I believed anti drone technology should be installed at Dubai’s airport

3	Disclosing information about potential crises can enhance managing efficiently and effectively potential drone crises
4	To effectively and efficiently manage potential drone crisis in Dubai airport, the CM team must be experts in crisis management
5	To effectively and efficiently manage potential drone crisis in Dubai airport, the CM team must be experts in risk management
6	I believe that in making proactive polices, operational managers must be involved in the decision making
7	To effectively and efficiently manage drone crisis, crisis plan must be communicated to all employees in the company

3.9.2 Items Measuring Crisis Awareness (CA)

From the research framework developed for this research, CA is measured using two dimensions namely: crisis cue identification and information gathering. Similar to how items measuring CM are developed, items measuring CA were also adapted from literatures used in chapter one and two.

The questions utilised in this study to assess crisis awareness are modified from the conclusions and justifications of other researchers, including Appelbaum et al. (2012), Rogova (2009), Wang and Pitsis (2019), Watkins & Bazerman (2003), and Waryjas (1999). The reasoning behind the adjustments is that these researchers' results echoed in several circumstances where safety and health officials might link the indicators of anticipated and unanticipated emergencies at the airport. Nine things in all were modified to measure the drone CA build.

Table 3. 2
Items Measuring Crisis Awareness

#	Items (8)
1	I am aware that residents in this area have the right to flight their unmanned aerial vehicles
2	I believed that flying drones in proximity to the airport is dangerous
3	I am aware that flying drones in areas such as airport pose no dangers to the health of airport commuters
4	It is logical to connect every unrelated abnormal information as potential crises
5	Connecting every abnormal information make sense to predict potential crisis
6	Getting timely information about potential event increases the chances of effectively and efficiently managing crisis
7	Understanding what went wrong will save the organization from potential crisis
8	I am well informed about the crises flying zone in the airport can caused

3.9.3 Items Measuring Crisis Readiness

The items used to measure drone crisis readiness in this research were adapted following the rationale and ways in which other items were adapted. The items used in this regard were adapted from the study of Backman and Rhinard (2018), Festag (2017) and Freitas (2016). Using this approach, eight items (four measuring human readiness and the other four measuring technological readiness) were adapted and used to measure crisis readiness in this research.

Table 3. 3
Items measuring Crisis Readiness

#	Items (8)
1	I believe the collaboration between departments can enhance the outcomes of crisis readiness
2	In setting crisis readiness plan, the policy makers should consider human error as one of the major factors.
3	I believed the airport managers made significance preparation to tackle drone crises if in case it happens
4	To ensure safety of the airport commuters, drone flying around the airport facilities should be discouraged
5	CM personnel should be effectively trained on how to contain drone crisis events
6	Data about previous crises from related industry should be accurately analyzed so as to create an effective readiness plan
7	Dubai airport should from time to time scan the restricted environment to drones for potential violations
8	Crisis personnel should be trained on how to crash spotted drone within the restricted airport facilities

3.9.4 Items Measuring Crisis Control (CC)

Particularly from the perspective of the CM, CC has an impact on organisational outcomes in terms of performance and sustainable performance. The items for this variable were gathered from studies conducted by Christensen and Kohls, Plant, et al., and Dettlaff in 2015 and 2011. (2003). The elements of this variable are shown in Table 3.4.

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Table 3. 4
Items measuring Crisis Control

#	Items (6)
1	The organization have a permanent response team for crisis situations
2	The team of CRE is performed from the most qualified and effective employees
3	In critical or crisis situation, the decision making is done on time
4	In critical or crisis situation, the decision making is taken by proper persons
5	In critical or crisis situation, the decision making is considering the needs of external stakeholders
6	The decisions are always in a high level of acceptance from employees

3.9.5 Items Measuring Crisis Response (CRE)

CRE expresses a more complete tactic to hypothesizing about the actions and strategies of overcome the possible crises at organizational level. The items for this variable are adapted from the study conducted by Wooten and James (2008). Table 3.5 shows the items of this construct.

Table 3. 5
Items measuring Crisis Response

#	Items (6)
1	The organization has a strong information for all the possible threats and crisis attributions
2	The organization has a response roadmap for every possible threat or crisis
3	The organization has a contingency plan for sustaining the core services in any condition
4	All managers know well the strategies and the roles in the critical or crisis

5	Pro-active not rec-active is part of the organization culture at all management levels
6	In the case of crises occurrence, there is a specialized team to deal directly with the situation.

3.9.6 Items Measuring Technology Usage (TU)

Items adapted from previous scholars' findings and arguments such as these are used to measure airport adoptions of new technology and how airport employees perceive its influence on airport security (Adey, 2003; Gallova, et al. 2018; Freathy & O'connell 2000). The reasoning behind the adjustments is that these researchers' results echoed in several circumstances where safety and healthcare officials might link the indicators of anticipated and unanticipated emergencies at the airport. Five different elements were modified to test the drone CA in total. It is displayed in table 3.6.

Table 3. 6
Items Measuring Technology Usage (TU)

#	**Items (5)**
1	Technology is seen as a policing tool to keep an eye on potential crisis-causing risks.
2	High technology usage at the airport area can effectively reduce the drones' threats
3	Technology usage in the airport is mainly used to identify illegal objects in the airport area
4	More security equipment is being developed using technology used to monitor drones at airports.
5	Dubai airport have the technical equipment's to detect and deal with illegal drones

Table 3. 7
Summary of Measurement Scale of the Variables Used in the Study

Sr. No	Variables	Number of Items	Source
01	CRE	6 Items (Q1-Q6)	Wooten and James (2008)
02	CC	6 Items (Q1-Q6)	Plant, et al., (2011), Dettlaff,et al.,2015 Christensen and Kohls., (2003).
03	CRS	8 Items (Q1-Q8)	Backman and Rhinard (2018) Festag (2017) Freitas (2016).
04	TU	5 Items (Q1-Q5)	Adey, 2003; Gallova, et al. 2018; Freathy & O'connell 2000
05	CM	7 Items (Q1-Q7)	Rousaki & Alcott, 2006
06	CA	8 Items (Q1-Q8)	Appelbaum et al. (2012), Rogova (2009), Wang and Pitsis (2019), Watkins & Bazerman (2003) and Waryjas (1999)

3.10 Reliability and Validity

The study's reliability and validity are critical for obtaining correct results from the analysis.

3.10.1 Reliability

A measure of reliability evaluates the degree of consistency in research or testing methods. When the study's conclusions are corroborated by other research or repeatedly duplicated, its dependability is guaranteed. According to Cavana et al. (2001), the study's measurements must be error-free in order to provide consistent results across time, place, and equipment types.

More particular, the study's instruments would be dependable such that the results could be consistently interpreted in varied contexts (Denscombe, 2010). The stability of the study results is validated throughout time by the representation of different groups of respondents in various circumstances using various approaches for obtaining dependability (Neuman, 2011).

Neuman (2011) asserts that initiatives like straightforward construct conception, the use of an accurate measurement scale, the inclusion of several questions for a construct, and the execution of a pilot test boost the study's dependability. But academics emphasise the value of upholding dependability, at least to a minimal extent (Zikmund et al., 2013).

A pilot research was conducted to evaluate the study's reliability before moving on to the main investigation, and conclusions were drawn using the computation of Cronbach's alpha, a method commonly used by academics. The reliability of the main study survey is ensured by the successful completion of the pilot study.

3.10.2 Content Validity

Validity refers to the degree to which a belief or assessment accurately reflects the outside reality. Validity encourages the method and information that are suitable for this study as from perspective of the research (Denscombe, 2010). In actuality, validity refers to the instrument's applicability in terms that it is adequate to examine the predicted measures (Field, 2009).

Hence, the extent by which a concept can be precisely quantified in order to be represented truthfully is its validity (Hair et al., 2010). There are four ways to verify a research, as per Zikmund et al. (2013): face validity, content validity, criteria validity, and construct validity.

Cronbach's Alpha gauges how dependable or internally consistent a construct's measure is, and how interconnected the various components that make up a construct are. The outcome is normally a number between 0 and 1, however a poor Cronbach's Alpha can also occur, signifying that the function is substantially flawed (for example, if some score items have opposite polarity in relation to some others, the mean of all the inter-item relationships can be bad; the polarity of the items must always be actually straightened). Dependability numbers below 0.6 are unsatisfactory, while those over 0.8 are preferred; the reliability coefficient should be as close to 1.0 as feasible (Sekaran, 2016).

Loadings refers to the estimated relationships in reflective size models (i.e., arrows from the latent variable to its indications). They decide how much of each component goes toward each assigned build.

Levels are studied when developmental data are taken into account, but they are of special relevance in the evaluation of reflective size models. Any launching credit rating that is higher than 0.708 is regarded as appropriate filling; the deleted value is 0.708. Contrarily, any running listed below 0.4 is seen as undesirable and ought to be eliminated.

Every factor and packing score in the range of 0.4 to 0.708 may be preserved, removed, or erased based on an analyst's suggestion (Hair Jr et al., 2016).

Concept validity is divided into discriminating and convergent subcategories or variants. Remember that they are interrelated; if you can show that you have evidence for both coming together and discriminant validity, you have already shown that you have evidence for construct validity.

However, neither is sufficient to demonstrate construct validity on its own. You must show that said to be linked acts are actually connected in order to prove validity. The image below shows four measurements, each of which is a point on a scale, that each assert to represent the idea.

The degree to which the conceptions actually differ from one another experimentally is referred to as discriminant validity. Additionally, it assesses how much each overlapping construct overlaps with the others. To evaluate discriminant validity, one can utilise the cross-loading of clue, the Fornell and Larker criteria, and the heterotrait-monotrait (HTMT) correlation ratio. Under the circumstance that the cut-off value of factor carrying is greater than 0.70, the variable packing indicators on the selected

construct must actually be larger than all loading of other constructs. The second criterion's discriminant validity is evaluated using the Fornell-Lacker criteria.

This method investigates the relationship between hidden constructions and the retrieved common variation's square origin (AVE). A hidden construct must adequately describe the distinctions of its own red flag rather than focusing on the differences of many other hidden constructs. The market value of the correlations with various other latent constructs must be less than the square root of the AVE for each construct.

Face validity rationally depicts the appearance of what is meant to be measured. The content validity covers the level of interest in the proposed investigation. While criterion validity measures the connections between either a to the same construct, important step in developing demonstrates the individuality of the construct through its dependability.

As a result, whether the data presents the genuine picture and addresses all relevant topics gives the sense that it is authentic (Denscombe, 2010). The researcher anticipated minimising the error term by employing precise measurements while carrying out the examination in order to assure the study's validity (Field, 2009). The validation approach has been verified in the study to enable the discovery of the true scenario from the research's findings.

Pilot Study

As a practice run for the main survey, a pilot study is used to identify any flaws in the questionnaires or survey methods (if any). This is done in advance of the research being online in order to accurately estimate a suitable sample size and enhance the study's methods (Hulley, 2007). A pilot survey is important since it addresses the general deficiencies of the survey. Preliminary questions on the pilot questionnaire should address the following issues, according to Brace (2004, p 164).

1. Do the questions sound right?
2. Do the interviewers understand the questions?
3. Do respondents understand the questions?
4. Have we included any ambiguous questions, double-barrelled questions, loaded or leading questions?
5. Can respondents answer the questions?
6. Are the response codes provided sufficient?
7. Do the response codes provide sufficient discrimination?
8. Does the interview retain the attention of respondents throughout?
9. Can the interviewers or respondents understand the routeing instructions in the questionnaire?
10. Does the interview flow properly?
11. Do the questions and the responses answer the brief?
12. How long does the interview take?
13. Have mistaken been made?
14. Does the routeing work?
15. Does the technology work?

Sekaran and Bougie (2013) state that the primary reason for conducting a pilot survey is to determine the validity and reliability of the questionnaire items, assess the

adequacy of the item wordings, phrases, and question construction in order to generate accurate results, evaluate the items to determine their ability to yield better responses, and determine whether or not the respondents can provide the required data.

An initial pilot research was carried out with a total of Forty-five (45) questionnaires being individually given to the various managers of the Dubai airport before data was collected. This was based on the idea put forward by Gay, Mills, and Airasian (2006) that trial research with a limited sample size of responders should be conducted before a larger study is undertaken.

The sample size for pilot studies should be as small as possible, ideally between 30 to 100 participants, but a larger sample size provides for a more robust outcome (Malhotra, 2008). A total of forty-five (45) questionnaires were utilized in this study to gather data on how well each of the constructs held up internally.

Numerous reliability tests are carried out by researchers; the most often utilised is called "the internal consistency reliability test" (Litwin, 1995). When measuring items that tap into a certain construct are homogeneous, it is because of the internal consistency of the measurements. Item coherence examines how closely items in a concept correlate with one another, such that respondents see each item as having the same general meaning. Coherence evaluates how closely things in a construct correlate.

Cronbach's coefficient alpha is the most often used internal consistency test. As a result, the better the instrument, the greater the coefficients (Sekaran & Bougie, 2013).

In accordance with Table 3.11, all outcomes showed a high dependability coefficient, which ranged from 0.862% to 0.945%. experts believe that the Cronbach's coefficient alpha test is reliable when it reads between 0.60 and 0.70. (Sekaran & Bougie, 2013; Hair *et al*., 2006; Nunnally, 1967).

Table 3.11
Summary of pilot test reliability results

Construct	Number of Items	Cronbach's Alpha
CA	08	0.862
CC	06	0.912
CRE	07	0.890
CRS	06	0.878
TU	08	0.945
CM	05	0.915

3.11 Data Analysis Methods

For data analysis, the study used two software packages as the following:

- SPSS software package used for data cleaning, demographic analysis, and descriptive analysis.
- SmartPLS used for reliability and validity besides to the relationship's evaluation.

3.11.1 SPSS for Data Cleaning, Demographic, and Descriptive Tests

Data screening is the preliminary crucial action in data study. It is the method of cleansing the data coming from outliers. The commonly used tests are uncompleted answers, unengaged screening, univariate screening, and multivariate screening.

The examination of respondents' opinions based on the central tendency of the mean score of the many items and variables is known as descriptive statistics. The mean score, minimum, maximum, and standard deviation are used to describe the analysis. Salleeh, Nair, and Harun (2012) define the different degrees of satisfaction as "extremely unsatisfied (1.0 - 1.80), dissatisfied (1.81 - 2.60), moderate satisfied (2.61 - 3.40), satisfied (3.41 - 4.20), and very satisfied (4.21 - 5.0)."

Demographic analysis or respondents 'profile is the distribution of respondents ' features in different taxonomies for every feature. Normally the different demographic questions are discussed in term of frequency and percentage.

3.12 Data Analysis Procedure

The primary research technique for collecting information and analysis, is original data from a well-defined questionnaire. A questionnaire analysis of a representative sample is also utilized to gather respondents' opinions on the research subject, which is done using the descriptive analysis technique.

The data in this research will be checked for reliability and normalcy using the Statistical Package for the Social Sciences (SPSS). In general, statistical methods should be used to analyse the gathered data. The data will be analysed by using Partial Least Squares Structural Equation Modelling (PLS SEM) method using clever PLS 3 software in this research.

In the area of route models incorporating latent constructs, researchers are utilizing the PLS SEM technique to evaluate the estimate that pertains to the connection. The

measurement model and the structural model are the two stages in the PLS SEM analysis. The structural model measures the data's reliability and validity, while the measurement model gives the results for hypothesis testing. The following is a comprehensive explanation of the data analysis method.

According to (Miles & Huberman, 1994; Sekaran & Bougie, 2016), data analysis consists of three steps: data reduction, data presentation, and conclusion drawing. It is a continuous and iterative process rather than a step-by-step approach. Data reduction, which includes data selection, coding, and categorization, is the first step in data analysis.

There are many publications, standards-setting organizations, papers, and other secondary data sources of research data, analysis, and findings on the subject.

Data reduction was done by first choosing articles and studies that dealt with the causes and consequences of the financial crisis, along with its repercussions on financial statements, as well as setting and maintaining accounting and auditing standards.

After acknowledging the fair value accounting and its relationship to inflated valuation, and acknowledging the possibility of mass understatement, the next step is to examine the reasons and the role that unappreciated chain reaction has in relation to earlier stages.

Another step of data display is the presentation of data in order to help making judgements based on trends in the reduced data set. These two steps are iterating

procedures, coding and categorizing. In conclusion, it assists in pulling a concrete conclusion. Based on previous observations and readings, there was a tentative assumption or theory about the topic that was used as a starting point for data collection, reduction, and display.

According to Sekaran and Bougie (2016), the final analytical activity in the process is drawing conclusions and finding answers to the research questions by clarifying the measured trends and regularities.

In order to refine outcomes, a routine was followed, which included checking for Goodness of Data and hypotheses testing. If the hypotheses on the effect of unresponsiveness were not supported, the exploratory study would still be worthwhile; hypotheses that were not supported would allow the assumptions to be refined further. The refined assumptions can then be tested in order to arrive at a reasonable conclusion.

3.13 PLS Measurement Model (Outer Model)

At the initial step of the PLS-SEM analytic technique, the evaluation of the measurement or outer model has been done. The evaluation of the outer or measurement model identifies the link between the observable variables (items, indicators, and manifestations) and the underlying unobserved construct. As a result, Churchill's recommended elements have been applied to operationalize the build (1979).

There may be formative or reflective indicators depending on the link between the latent concept and the associated items (indicators / observable variables). Additionally, when observable constructs are being constructed, the measurement model may be evaluated using both formative and reflecting indicators together or alone with one of them (formative or reflective) (Fornell & Bookstein, 1982).

Additionally, depending on the theoretical underpinning, the operationalization of the concept is either done using formative or reflective indicators (Hair et al., 2014). Because the indicators of the many constructs employed in this study are similar to the reflecting nature of the constructs, the measuring model for the current study was built using reflective indicators (i.e., items are caused by the construct).

Furthermore, the loadings for each item were determined in measurement model analysis to theoretically characterise the constructs. Furthermore, the measurement model investigated the reliability of the items (survey instrument) used to assess the construct. Furthermore, the validity of the study's model is investigated in order to assess the soundness of the items.

3.14 Indicator Reliability (Outer Loading)

A measure of reliability evaluates the degree of consistency in research or testing methods. When the study's conclusions are corroborated by other research or repeatedly duplicated, its dependability is guaranteed. According to Cavana et al. (2001), the study's measurements must be error-free in order to provide consistent results across time, place, and equipment types.

More particular, the study's instruments would be trustworthy to enable consistent interpretation of the findings in a variety of contexts (Denscombe, 2010). As time goes on, the consistency of the study's findings is confirmed by the representation of diverse respondent groups in various circumstances using various techniques for ensuring dependability (Neuman, 2011).

This analysis determines at items in the loading relationships. If there are many factors associated with a single latent variable in a statistical model, determining the loading score of each item in the variable is critical to ensuring that the variable receives the proper and adequate loading from its associated factors.

Any loading score that is greater than or equal to 0.708 meets the criteria set by the cut-off value of 0.708. However, a loading of less than 0.4 will be removed because it is deemed weak. It is up to the expert in the analysis to decide whether to keep or remove any factor with a loading score between 0 and 708. (Hair et al., 2016).

3.15 Internal Consistency Reliability

To investigate the properties of measuring scales and their components, reliability analyses is used. The accuracy and reliability of the variable are measured (Sekaran, 2016). Cronbach's alpha reliability coefficient was obtained using questionnaires designed in the Likert scale for the dependent and independent variables.

The cronbach's Alpha shows how well the objects of the set are interrelated. The nearer the reliability coefficient gets to 1.00, the better the instruments are in general; reliability less than 0.6 is considered poor, while reliability greater than 0.8 is

considered good (Sekaran, 2016). The reliability coefficient required for good results is summarized below.

3.16 Convergent Validity

The degree to which a group of variables intersect in measuring a particular concept is known as convergent validity (Hair et al., 2016). Convergent validity denotes that a group of indicators all represent the same underlying construct, as evidenced by their one-dimensionality. The average variance extracted (AVE) is suggested by Fornell and Larcker (1981) as a selection criterion of convergent validity. A sufficient convergent validity score of at least 0.5 suggests that a latent variable can explain more than half of the variation of its indicators on average.

3.17 Discriminant Validity

The discriminant validity of the measurements indicates how well items distinguish between constructs. Simply put, it demonstrates that the items that employed various structures do not overlap. As a result, while constructs are connected, they measure different notions. If the discriminatory validity of the measures has been proved, then the shared variance between every structure and its measure must be larger than the difference between different constructions.

An approach to assessing the discrimination was provided by Fornell and F. Larcker (1981). In this technique, each building's AVE should be more than the square between that structure and the other building, or the square root of each building's AVE should be more than the correspondence between a particular building and other buildings.

3.18 PLS Structural Model (Inner Model)

The second model is a structural model that refers to additional LVs with latent endogenous variables (LV). The model is called the internal model in PLS. Chin (1998) offered a set of criteria and Hair (2016) re-proposed these criteria for measuring partial model architectures.

Furthermore, theoretical and logical arguments were followed when hypothesising the link between constructs. Thus, the outcomes of this study's PLS-SEM structural model assessed the model's predictive capacity as well as the link between the components (Hair et al., 2014). All of these criteria are acceptable for evaluating the internal model.

3.19 Collinearity Assessment

The correlations of the predictor variables were assessed using the collinearity test at the start of the structural model evaluation. In this regard, each component of the structural model and the predictor constructs were investigated individually. To examine collinearity in this study, tolerance computations for each construct and indicator were measured. Tolerance is defined as the variation of one indication that is not explained by the other indicators in the same block.

Furthermore, the variance inflation factor (VIF) was calculated as a measure of collinearity, commonly known as the reciprocal of tolerance. The values of tolerance >0.20 and VIF5.00 are the permitted limits, while values over these limits indicate a collinearity concern (Hair et al., 2011).

3.20 Path Coefficient`

In order to determine the degree of significance, the path coefficient of the model looks at the loadings for the connections between the constructs. The route coefficient can have a value between -1 and +1. Positive values near +1 indicate strong positive relationships, while negative values near -1 indicate strong negative relationships, while values around 0 indicate lesser relationships and close to 0 indicate insignificant. In this regard, 5000 bootstrapped samples of data were conducted, with 0 cases per sample (Hair et al., 2014; Henseler et al., 2009). Through the computation of the structural model's t-statistics, the route coefficients () values from this study's bootstrapping technique were utilised to determine the relevance of the path.

Additionally, this study has supplied p-values and bootstrapping confidence intervals. Even though it is argued that none of the three significance tests are necessary to report because they provide the same result, they are nonetheless conducted for more clarity.

3.21 Coefficient of Determination (R2)

The determination coefficient (R2) value represents an external variability in the endogenous or manifest variables. The R2 values of Chin (2008) in path models are 0.67, 0.33, and 0.19, respectively, in the PLS path models. The R2 values for endogenous latent variables are evaluated as follows according to the Cohen (1988) technique, on the other hand: 0.26 and above signify significant, 0.1 to 0.25 to 0.02 to 0.12 to show a low variation caused by external factors.

3.22 Effect Size of Coefficient of Determination (*f2*)

The effect size (f2) refers to whether the removal of a certain exogenous latent variable from the model resulted in significant changes in endogenous construct variable R2 (coefficient of determination) values. The influence of each exogenous (independent) variable on the endogenous (dependent) variable in this study was quantified using f2 (effect size) values. The variation explained by each external variable in the model is measured by f2. The exogenous construct's strong, medium, and low effects are represented by values of 0.35, 0.15, and 0.02, respectively (Hair et al., 2014; Cohen, 1998).

3.23 Predictive Relevance (Q2)

The PR (Q2) is another structural model assessment that includes the capacity of the model to forecast. Stone Geisser's Q2 is the most commonly used predictive relevance measuring metric (Stone, 1974; Geisser, 1975) (as cited in Tenenhaus, Amato, & Esposito Vinzi, 2004). The Stone-Geisser criteria implies that the model must be able to predict latent variable endogenous indicators.

The blindfolding technique is used solely for endogenous latent variables that are operationalized using a reflecting measurement model. A metric Q2 may be used to measuring the relative influence of predictive relevance. The Q2 values of the latent variables 0.02, 0.15 and 0.35 represent a minor, medium, or significant predictive significance.

3.24 Hypotheses Testing

For hypothesis testing, the structural model results are employed in PLS SEM. T-statistics are usually the criteria for testing hypotheses. If the T stats of a certain variable are greater than 1.96, the value is expected to be significant at a level of 5 percent. The p-value for testing hypotheses and importance levels will nonetheless be calculated in this investigation too. A p-value below 0.05 means a degree of trust of 95%, while a p-value of less than 0.001 means 99%.

3.25 PLS-SEM Justification

PLS-SEM is named structural equation modelling of the second generation (Herman Wold, 1982). The relatively new approach works effectively with model structural equation that contains latent variables and a number of connections between cause and effect (Gustafsson & Johnson, 2004).

The PLS-SEM method is a good and versatile instrument for developing and predicting a statistical model (Hair et al., 2016). In this study, for the following reasons, in particular, the PLS method was utilized:

- First, models of structural equations were shown to be better than those of regressions (Iacobucci, Saldanha, & Deng, 2007). This technique is most appropriate when the sample size is relatively small (Lei & Lomax, 2005).
- Secondly, when models are complicated, PLS path modelling becomes more appropriate for real-world applications and more beneficial to use (Hulland, 1999).
- Thirdly, data normality is a problem in most social science studies, but PLS path modelling does not necessitate normal data (Chin, 1998).

- PLS-SEM, on the other hand, provides more significant and reliable results (Bollen & Lennox, 1991). When it comes to social and behavioral sciences, PLS-SEM is one of the most powerful statistical tools because it allows researchers to simultaneously test multiple relationships.
- Fifth, Hair et al (2016) argued that PLS was known as the SEM method alternative. PLS path modelling is more appropriate for complex modelling (with complete breaking up method), mediating and moderating effect, such as hierarchical structures.
- Sixth, one of its powerful characteristics is its suitability for predictive research where methodology helps scientists to focus on endogenous constructions explanation.

3.25.1 SmartPLS for Relationships Tests

As stated by Hair et al. (2016); "testing the hypothesis of the study is essential and only can be acquired by estimating the path coefficient values of the different relation within the model. P-values and T-statistics is the commonly used techniques to tests the significance of a relation; T-statistics is the significance of path coefficient and P-value is significant level or probability estimate value. In addition, path coefficient is calculated to reveal the extent level of the relation. As Hair et al. (2016), the rule of thumbs for assessing the values is; for P-value (probability estimate value), the most common used threshold in psychological research is 0.05 (5%). However, some studies can use the level of 0.01 (1%) or 0.1 (10%). For T statistics, any value above 1.96 is significant with a two-tailed test or any value above 0.1.65 is significant with a one-tailed test".

While predicting the result of an event, the coefficient of determination is a statistical measure that looks at how variations in one variable may be explained by variations in a second variable. Simply said, when conducting style evaluation, investigators mainly rely on this coefficient, often known as R-squared (or even R2), which measures the strength of the direct association between two variables.

An additional study of the building model that takes into account the forecasting ability of the model is considered Expecting Relevant (Q2). Stone-Q2 The Geisser step is one of the most often utilised predictive relevance steps (Stone, 1974; Geisser, 1975). In current PLS software packages, Q2 is frequently determined with an omission proximity of 5–10. The standards state that an anticipated model is one with a cross-legitimized redundancy Q2 > 0.5 (Chin 2010).

3.26 Summary

In this chapter, the researcher outlined the research philosophy that assist in selecting the best research method used in collecting data, selecting population and the samples needed. Furthermore, the research framework, and research hypotheses were developed. Besides the items to be used in data collection were adapted and the chapter proposed the analysis to be used in the next chapter four.

The study is deductive and begins with a theory and finishes with the hypothesis testing. The study is quantitative research using descriptive measurements, variance, and covariance approaches for statistical analysis. The study is a nature exploratory study since it focuses on a field of study where prior investigations have been carried

out. Furthermore, the inquiry is scientific, as methodical processes are adopted and accepted and disapproved.

With respect to the instrument, a literature-driven questionnaire was developed in English to fit the context of study. The study includes two-part population and perception that are developed in the closed response to Likert 5 levels. Contain validity (expert panel), face validity (focus group) and internal consistency reliability are the key to validity and reliability of the survey.

This study's sample includes all of the Dubai airport managers, and the actual sample size is 364, which meets both the study's minimum sample size and the study's effective sample size requirements without being excessive. Direct collection by distributing the survey in a variety of locations that belong to Dubai airport and data collection took place between 2020 and 2021. The sampling technique suitable for this research is probability sampling.

CHAPTER FOUR

FINDINGS AND ANALYSIS

4.1 Introduction

As this study is a quantitative-based approach, chapter 5 proposed the statistical analysis in explanation means. The chapter shows in information all the steps that was put on examine the information precision until obtaining the hypothesis associated results for the variable, CRS, CA, CC, CRE, to CM. While TU, as moderation relation to effective in the UAE Airport. The study makes use of various statistical techniques that used by means of two statistical packages, Smart PLS for innovative PLS-SEM analysis, and also SPSS for necessary analysis. The chapter are conversation data screening, demographic analysis, descriptive analysis, reliability and validity analyses, connections as well as efficiency assessments, and moderation impact analyses.

4.2 Data Cleaning

Data screening is the initial crucial step in data analysis. Most of the data will come from the distributed survey, cases that have not been completed, and the first round of analyses that have not yet been engaged in. Where all distributed is 440 cases, collected samples 392 case, uncompleted Cases 15 case, initial cases for analysis 377 case, unengaged screening 8 cases, univariate screening 4 case, multivariate screening 1 case, and the cleaned cases for analysis 364 case. Table 4.1: shows the details.

Table 4. 1
Data Screening Analysis

Count of	Number of surveys	Percentage (%)
“Distributed Survey	440	
Collected Cases	392	89.09%
Uncompleted Cases	15	3.83%
Initial Cases for Analysis	377	85.68%
Unengaged Screening	8	2.12%
Univariate Screening	4	1.06%
Multivariate Screening	1	0.27%
Cleaned Cases for Analysis”	364	82.73%

4.3 Demographic Analysis

The distribution of participant roles across various taxonomies for each attribute is known as the participant's profile. There are 4 features for this particular study, which are as follows:

- Gender
- Age
- Qualification
- Marital status
- Work Experience

Gender

According to gender, men account for 61% of participants, while women account for 39% of those taking part. Which is to be expected in a society like this. Below table 4.2 and graph is showing the details.

Table 4. 2
Demographic Analysis of Gender

		Frequency	Percent
Gender	Male	222	61.0
	Female	142	39.0
	Total	364	100

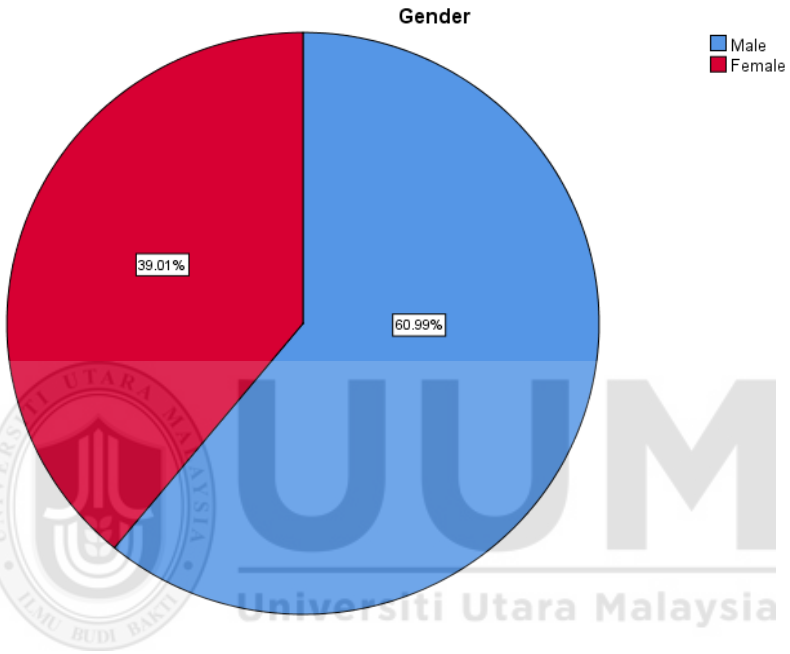

Figure 4. 1 Demographic Analysis of Gender

Age

The respondents' ages range from 18 to 55, with 11.3 percent being between 18 and 25, 30.8 percent being between 26 and 35, 29.9 percent being between 36 and 45, 17.6 percent being between 46 and 55, and 10.4 percent being over 55. Table 4.3 and a graph show the specifics below.

Table 4. 3
Demographic Analysis of Age

		Frequency	Percent
Age	18-25 Years	41	11.3
	26-35 Years	112	30.8
	36-45 Years	109	29.9
	46-55 Years	64	17.6
	Above 55 Years	38	10.4
	Total	364	100.0

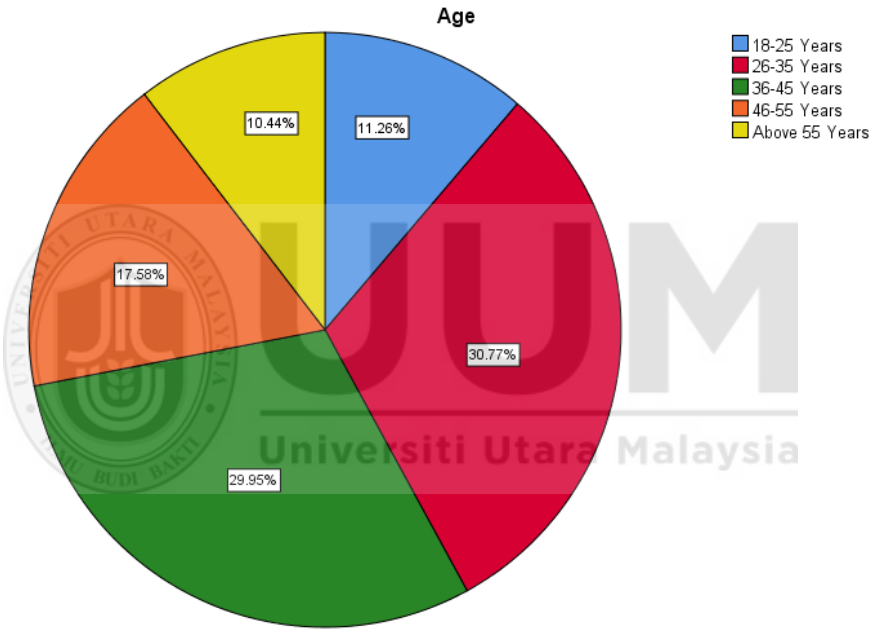

Figure 4. 2 Demographic Analysis of Age

Qualification

Respondents with a high school diploma make up 10.7% of the total, while those with a diploma and a bachelor's degree make up 52.4% of the total. Those with a postgraduate degree make up 11.5% of the total, while Others make up 3.6 percent. Below table 4.4 and graph is showing the details.

Table 4. 4
Demographic Analysis of Qualificarion

		Frequency	Percent
Qualification	High School	39	10.7
	Diploma	83	22.8
	Bachelor	187	51.4
	Postgraduate	42	11.5
	Orhers	13	3.6
	TotaI	364	100.0

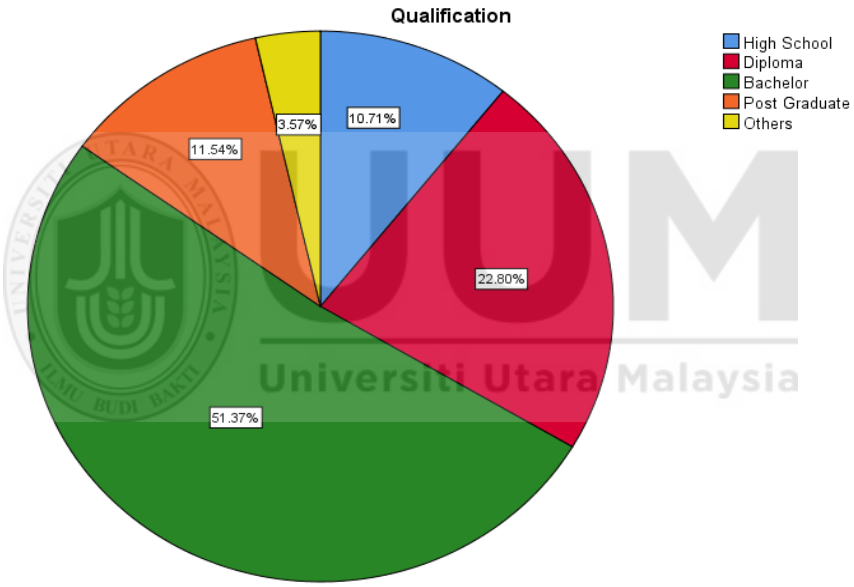

Figure 4. 3 Demographic Qualification

Marital status

When it comes to respondents' marital status, singles make up 34.9% of the total, married people make up 54.7%, divorced people make up 4.9%, and widows make up 5.5 percent. Below table 4.5 and graph is showing the details.

Work Experience

Those who have worked for less than five years represent 30.5% of those who have worked for between five and ten years represent 27.7% of those who have worked for between eleven and fifteen years represent 31.3 percent, and those who have worked for more than fifteen years represent 10.4%. Table 4.6 and a graph show the specifics below.

Table 4. 5
Demographic Analysis of Marital status

		Frequency	Percent
Marital status	Single	127	34.9
	Married	199	54.7
	Divorced	18	4.9
	Widowed	20	5.5
	Toral	364	100.0

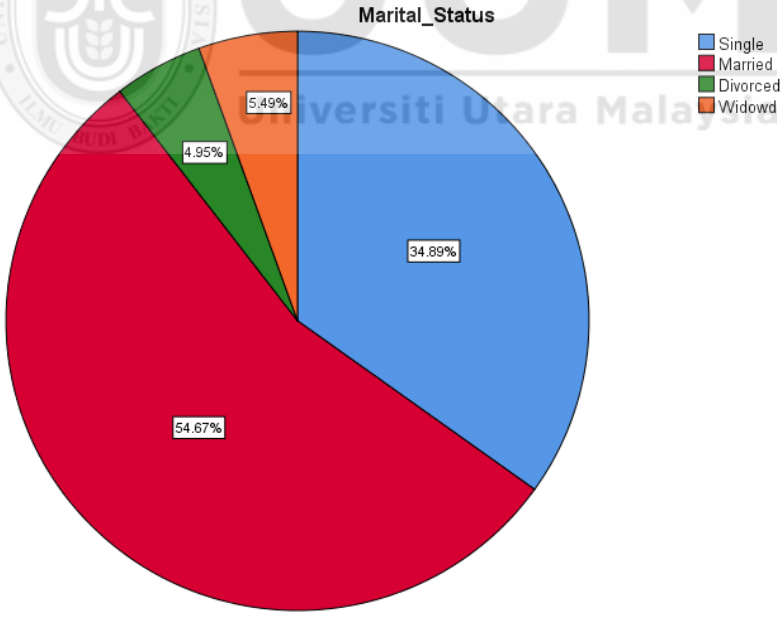

Figure 4. 4 Demographic Marital status

Table 4. 6
Demographic Analysis of Marital status

		Frequency	Percent
Work Experience	Less than 5 Years	111	30.5
	5 - 10 Years	101	27.7
	11-15 Years	114	31.3
	More than 15 Years	38	10.4
	Total	364	100.0

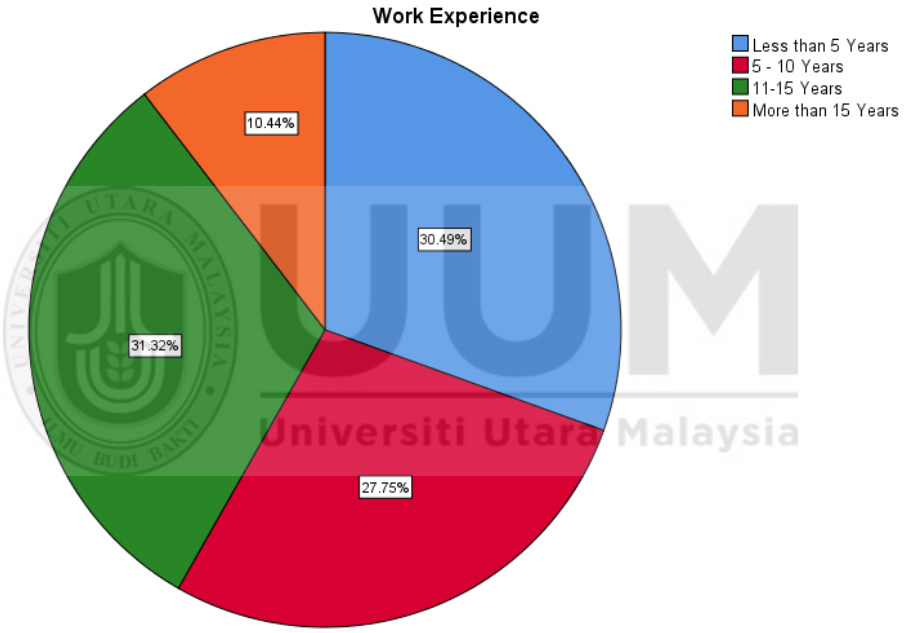

Figure 4. 5 Demographic Marital status

4.4 Descriptive Statistics

Descriptive analysis examine the responses of the respondents based on the primary tendency of the average score of the numerous items and components. The analysis is provided in terms of the mean score, minimum, maximum, and standard deviation. The subsequent explanations are used by Salleeh, Nair, and Harun (2012) to identify the various opinion levels "very dissatisfied (1.0 – 1.80), dissatisfied (1.81 – 2.60),

moderate satisfied (2.61 – 3.40), satisfied (3.41 – 4.20), and very satisfied (4.21 – 5.0)."

For each variable, there are 8 questions, for example, crisis readiness (CRS) (items). The average of the variable's items reveals the level of understanding in each situation. In addition, the research's mean value, 364 cases, demonstrates the knowledge of each variable. Different descriptive statistics perspectives are being developed in this study. The statistics in table 4.7 indicated that participants have a favourable opinion of the variable CA, which has a mean value of 3.0170. The mean value of the variable CM is 3.4421, which suggests that participants had a favourable opinion of it.

With an average rating of 3.0267, the CM variable demonstrates a high degree of satisfaction and the optimistic outlook of the respondents. The CRE variable displays a satisfied level that represents respondents' favourable impressions with a mean value of 3.2236.

With a mean value of 3.2132, the CRS variable shows that respondents have a favourable impression of it. With a mean value of 3.4560, the TU variable exhibits a high level of satisfaction, demonstrating that respondents had a positive view.

With the variable TU having the greatest mean value and the variable CA having the lowest mean value, the six constructs of this study's respondents appear to be highly satisfied. More information about the constructs can be found in the table below: Table 4.7.

Table 4. 7
Descriptive Statistics of Research Constructs

	N	Min	Max	Mean	Std. D
Crisis Awareness	364	1.12	4.73	3.0170	.94243
Crisis control	364	1.35	5.00	3.4421	1.02330
Crisis Management	364	1.46	4.90	3.0267	.78525
Crisis Response	364	1.35	4.86	3.2236	.89162
Crisis Readiness	364	1.54	5.00	3.2132	1.00095
Technology usage	364	1.51	5.00	3.4560	1.00129
Valid N (listwise)	364				

Descriptive Statistics of Crisis Awareness (CA)

Regarding the construct CA, there are only 8 things, and the total perception ranges from 2.74 to 3.30, which is regarded as a degree of positive satisfaction. The item with the greatest perception is (CA5), which is connected to the case's issue below. The construct's details are shown in Table 4.8, which is located below.

Table 4. 8
Descriptive Statistics of Crisis Awareness (CA)

	N	Min	Max	Mean	Std. D
CA1	364	1	5	2.87	1.505
CA2	364	1	5	3.20	1.246
CA3	364	1	5	3.18	1.329
CA4	364	1	5	3.02	1.275
CA5	364	1	5	3.30	1.222
CA6	364	1	5	2.76	1.236

CA7	364	1	5	2.74	1.164
CA8	364	1	5	3.02	.971
Crisis Awareness	364	1.12	4.73	3.01	.94243
Valid N (listwise)	364				

Descriptive Statistics of Crisis control (CC)

The construction CC only includes six components, and of them, CC4 (which is relevant to the issue below from the case) has the greatest general impression (which is between 2.53 and 3.72, which is regarded as a positively pleased level). The construct's details are shown in the Table 4.9 below.

Table 4. 9
Descriptive Statistics of Crisis control (CC)

	N	Min	Max	Mean	Std. D
CC1	364	1	5	3.71	1.275
CC2	364	1	5	3.59	1.375
CC3	364	1	5	3.58	1.200
CC4	364	1	5	3.72	1.245
CC5	364	1	5	3.51	1.415
CC6	364	1	5	2.53	1.267
Crisis control	364	1.35	5	3.44	1.023
Valid N (listwise)	364				

Descriptive Statistics of Crisis Management (CM)

Concerning the construct crisis management (CM), it only comprises seven things, with the total perception ranging between 2.39 and 3.40, indicating a positive to very positive pleased level. The item with the greatest perception is (CM4), which is connected to the question from the scenario below. The specifics of the build are shown in Table 4.10: below.

Table 4. 10
Descriptive Statistics of Crisis Management (CM)

	N	Min	Max	Mean	Std. D
CM1	364	1	5	3.37	.931
CM2	364	1	5	3.40	.964
CM3	364	1	5	3.34	.896
CM4	364	1	5	3.40	.929
CM5	364	1	5	2.39	1.010
CM6	364	1	5	2.49	1.163
CM7	364	1	5	2.52	1.112
Crisis Management	364	1.46	4.90	3.0267	.78525
Valid N (listwise)	364				

Descriptive Statistics of Crisis Response (CRE)

Concerning the construction CRE, there are only 6 elements, and the general impression ranges from 2.95 to 3.49, which is regarded as a level of positive satisfaction. The item with the greatest assessment is (CRE2), which is related to the case's issue beneath. Details about the construct are displayed in Table 4.11 below.

Table 4. 11
Descriptive Statistics of Crisis Response (CRE)

	N	Min	Max	Mean	Std. D
CRE1	364	1	5	3.14	1.296
CRE2	364	1	5	3.49	1.024
CRE3	364	1	5	3.37	1.167
CRE4	364	1	5	3.31	1.150
CRE5	364	1	5	3.05	1.288
CRE6	364	1	5	2.95	1.029
Crisis Response	364	1.35	4.86	3.22	.89162
Valid N (listwise)	364				

Descriptive Statistics of the Crisis Readiness (CRS)

Concerning the construct crisis ready (CRS), it only comprises 8 things, with the total perception ranging between 2.56 and 3.69, which is regarded a positive pleased level. The item with the greatest perception is (CRS2), which is connected to the question from the instance below. The specifics of the build are shown in Table 4.12: below.

Table 4. 12
Descriptive Statistics of Crisis Readiness (CRS)

	N	Min	Max	Mean	Std. D
CRS1	364	1	5	3.42	1.491
CRS2	364	1	5	3.69	1.157
CRS3	364	1	5	3.13	1.498
CRS4	364	1	5	3.30	1.399
CRS5	364	1	5	3.18	1.296

CRS6	364	1	5	3.52	1.024
CRS7	364	1	5	3.20	1.471
CRS8	364	1	5	2.56	1.130
Crisis Readiness	364	1.54	5.00	3.21	1.00095
Valid N (listwise)	364				

Descriptive Statistics of Technology usage (TU)

The construct technology usage (TU) only contains 5 things, and of them, TU1 (which is related to the question below on the case) does have the greatest general impression (which is between 2.81 and 3.68, which is regarded a favorable pleased level). Details about the construct are displayed in Table 4.13 below.

Table 4. 13
Descriptive Statistics of Technology usage (TU)

	N	**Min**	**Max**	**Mean**	**Std. D**
TU1	364	2	5	3.68	1.041
TU2	364	2	5	3.55	1.036
TU3	364	1	5	3.46	1.375
TU4	364	1	5	3.61	1.415
TU5	364	1	5	2.81	1.299
Technology usage	364	1.51	5.00	3.4560	1.00129
Valid N (listwise)	364				

4.5 Reliability and Validity Assessment of the Proposed Model

Prior to performing functional tests, it is crucial to check the sample dataset for validity and reliability. The measurement model technique's methodical approach (Hair Jr et al., 2016).

To make sure that the objects and variables are correctly loaded, consistent, and distinct, the method uses a number of checks. The initial phase is indicator reliability (Outer and Cross Loading), followed by internal consistency (Composite Reliability), convergent validity (AVE value), divergent validity (AVE numbers), latent variable correlations, and finally collinearity analysis (Variance Inflation Factor "VIF").

4.6 Indicator Reliability of Research Variables

Except for specific goods that prevent it from having a significant impact on other items, only items with a loading higher than 0.708 will be allowed, and those with a loading lower than this will be dismissed (see Table 4.14). Because two of the products had loading times under 0.60 and had poor internal consistency, it was decided to eliminate them.

As stated by Hair Jr et al. (2016) and Hulland (1999); “Outer loading and cross loading for every item is estimated to test it with its associated variable. Every item must have sufficient loading within its associated variable. Any loading above the threshold of 0.708 is sufficient and any loading below the threshold of 0.4 is inadequate. Any measure between 0.4 and 0.7 is suspected and can be deleted or kept based on the unique conditions for every study. Cross Loading, scale is used to assure that for every

item, its loading within the associated construct is higher than any other loading in the remaining constructs."

Table 4. 14
Outer Model Loading Of Research Items

	Before	**After**
CA1	0.739	0.740
CA2	0.794	0.795
CA3	0.870	0.870
CA4	0.842	0.841
CA5	0.701	0.701
CA6	0.706	0.707
CA7	0.709	0.708
CA8	0.715	0.715
CC1	0.826	0.827
CC2	0.730	0.730
CC3	0.775	0.774
CC4	0.778	0.779
CC5	0.846	0.848
CC6	0.772	0.770
CM1	0.783	0.790
CM2	0.779	0.789
CM3	0.760	0.770
CM4	0.787	0.795
CM5	0.571	-

CM6	0.876	0.873
CM7	0.879	0.870
CRE1	0.792	0.794
CRE2	0.712	0.716
CRE3	0.787	0.786
CRE4	0.857	0.855
CRE5	0.729	0.728
CRE6	0.746	0.746
CRS1	0.762	0.786
CRS2	0.730	0.738
CRS3	0.824	0.818
CRS4	0.769	0.785
CRS5	0.779	0.766
CRS6	0.394	-
CRS7	0.832	0.828
CRS8	0.856	0.859
TU1	0.876	0.876
TU2	0.934	0.934
TU3	0.858	0.857
TU4	0.726	0.726
TU5	0.741	0.742

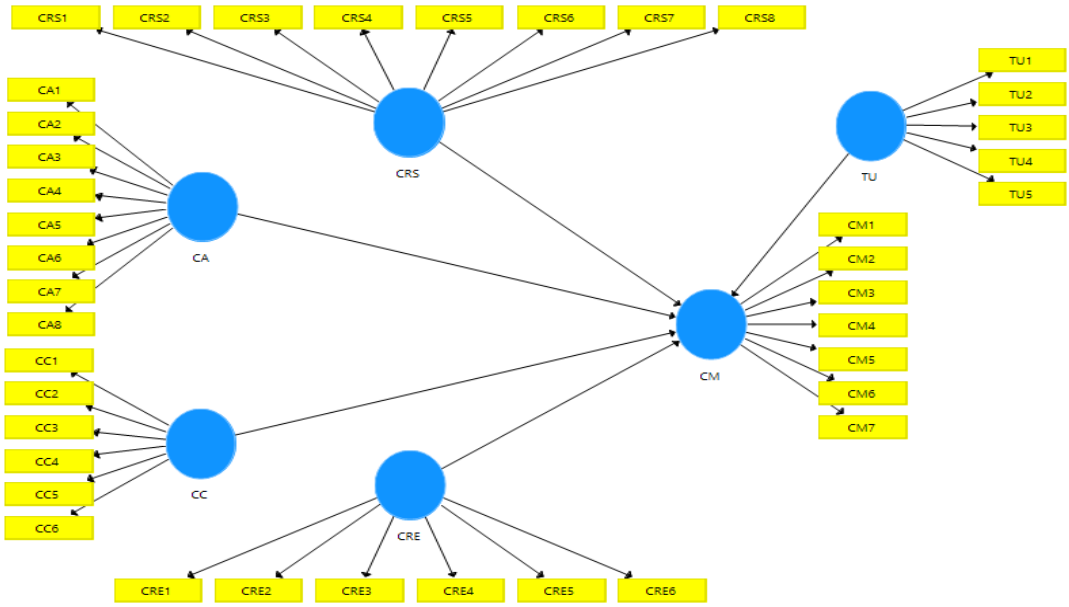

Figure 4. 6 Structural Model Outer Loading Estimates

4.7 Internal Consistency of Research Variables

The said that each variable's components ought to express the same principle and relate to one another. Cronbach's Alpha or the composites integrity step can be used to estimate internal consistency (Bagozzi Yi, 1988). (Hair et al., 2014). Any action that exceeds the 0.7 success level is successful. Additionally, in an initial research project, 0.6 is deemed great.

On the other hand, Cronbach's Alpha reliability ranges from 0.864 to 0.905, which is successful to outstanding, while the composite dependability ranges between 0.898 and 0.924 and thus highly approved. Table 4.15 reveals this. Finally, the results reveal a successful degree of consistency and reliability.

Table 4. 15
Internal Consistency Assessments of Research Variables

	Composite Reliability	**Cronbach's Alpha**
CA	0.917	0.896
CC	0.908	0.880
CM	0.922	0.899
CRE	0.898	0.864
CRS	0.924	0.905
TU	0.917	0.886

4.8 Convergent Validity of Research Variables

This approximated the extent of relativeness in between items of the identical variable. As stated by Hair et al. (2016); "the extent of relativeness between items of the same variable is measure by the Average Variance Extracted (AVE) values, which supposed to be above 0.5." The AVE findings for this study range between 0.577 to 0.865, which is higher than the threshold value of 0.5. As a result, we can state that the dataset for this investigation complies with the conditions for convergent validity.

Table 4. 16
Convergent Validity Assessment of Research Variables

	AVE
CA	0.581
CC	0.622
CM	0.665
CRE	0.596
CRS	0.637
TU	0.690

4.9 Discriminant Validity of Research Variables

Validity calculated the level of non-relativeness of the foreign items, as opposed to how AVE shows the relativeness. According to Hair et al (2016); “AVE shows the extent of relativeness, Discriminant Validity estimated the extent of non-relativeness of the foreign items.

Therefore, the Fornell & Larcker criterion is a matrix of latent variables correlations that compared with the associated AVE value. The value of square root of AVE must be higher than all other latent variable correlations. The test is successful if the value in the diagonal is higher than any other value within the crossed column and raw.”

The Fornell and Larcker criterion matrix was shown in Table 4.17. The matrices are refined correlation matrices for latent variables. The test is successful if the value in the diagonal is greater than any other worth in the crossed column and also raw. There are more points in the common column than in the raw for TU, with a score of 0.831. Everything else follows the same standard, so the five variables in this study have a high degree of discriminant validity.

Cross loading is another critical evaluation for confirming discriminant validity. The requirement for cross - loadings is that the involved construction must have a proper and higher loading than any other sort of loading in just about any external variable. Outcomes of cross - loadings of all elements in the row and all variables in the columns are shown in Table 4.18.

Table 4. 17
Fornell & Larcker Criterion Matrix Assessment of Research Variables

	CA	CC	CM	CRE	CRS	TU
CA	0.762					
CC	0.080	0.789				
CM	0.543	0.222	0.816			
CRE	0.436	0.131	0.588	0.772		
CRS	0.197	0. 145	0.449	0.237	0.798	
TU	0.257	0.068	0.567	0.407	0.197	0.831

Table 4. 18
Cross Loading Assessment of Research Variables

	CA	CC	CM	CRE	CRS	TU
CA1	0.740	0.056	0.454	0.389	0.187	0.302
CA2	0.795	0.069	0.447	0.374	0.159	0.276
CA3	0.870	0.072	0.539	0.406	0.228	0.276
CA4	0.841	0.089	0.410	0.336	0.109	0.109
CA5	0.701	0.035	0.378	0.344	0.078	0.166
CA6	0.707	0.048	0.296	0.191	0.099	0.131
CA7	0.708	0.014	0.344	0.275	0.154	0.138
CA8	0.715	0.093	0.372	0.277	0.148	0.098
CC1	0.093	0.827	0.191	0.112	0.147	0.066
CC2	0.078	0.730	0.147	0.094	0.120	0.047
CC3	0.044	0.774	0.135	0.077	0.138	0.045
CC4	0.003	0.779	0.129	0.046	0.100	0.010
CC5	0.034	0.848	0.203	0.108	0.109	0.032
CC6	0.103	0.770	0.211	0.152	0.083	0.102
CM1	0.458	0.170	0.790	0.470	0.378	0.395

CM2	0.396	0.257	0.789	0.452	0.357	0.438
CM3	0.421	0.153	0.770	0.464	0.310	0.366
CM4	0.452	0.157	0.795	0.444	0.339	0.434
CM6	0.426	0.224	0.873	0.515	0.420	0.557
CM7	0.504	0.128	0.870	0.529	0.384	0.557
CRE1	0.232	0.068	0.378	0.794	0.138	0.364
CRE2	0.264	0.082	0.384	0.716	0.138	0.435
CRE3	0.343	0.111	0.452	0.786	0.181	0.169
CRE4	0.375	0.102	0.517	0.855	0.191	0.244
CRE5	0.402	0.126	0.518	0.728	0.192	0.423
CRE6	0.362	0.108	0.437	0.746	0.245	0.273
CRS1	0.180	0.097	0.316	0.228	0.786	0.121
CRS2	0.177	0.083	0.298	0.174	0.738	0.068
CRS3	0.145	0.124	0.412	0.223	0.818	0.217
CRS4	0.126	0.116	0.369	0.186	0.785	0.119
CRS5	0.114	0.094	0.341	0.129	0.766	0.182
CRS7	0.202	0.158	0.380	0.201	0.828	0.147
CRS8	0.163	0.129	0.372	0.181	0.859	0.224
TU1	0.206	0.092	0.513	0.400	0.203	0.876
TU2	0.235	0.079	0.519	0.381	0.156	0.934
TU3	0.259	0.052	0.525	0.366	0.180	0.857
TU4	0.083	0.071	0.322	0.241	0.119	0.726
TU5	0.248	-0.014	0.435	0.271	0.151	0.742

4.10 Multicollinearity Assessment of Research Variables

The VIF measures whether there is a significant correlation between latent and dependent variables. As stated by Wong (2013); “Variance inflation factor (VIF) is

testing the absence of significant correlation between latent variables and dependent variables. Any VIF value with the range between 0.2 and 5 is acceptable."

The VIF level between the CC and CM variables must be at least 1.032. The highest possible VIF value is 1.429 when comparing the CRE and CM variables. All VIF values are therefore within acceptable levels, and multicollinearity has been verified.

Table 4. 19
Multicollinearity Validity Assessment of Research Variables

	VIF (CM)
CA	1.258
CC	1.032
CM	-
CRE	1.429
CRS	1.099
TU	1.224

4.11 Assessing Predictive Power of Research Model

Hair (2014) stated that "predictive power is the variance explanation of the endogenous variable and known as R square (R2). On the other hand, predictive relevance is the variance relevance of the endogenous variable and known as Q square (Q2). The rule of thumbs for assessing the values is; R square (R2) can be strong (more than 0.75), moderate (between 0.5 and 0.75), or satisfactory (between 0.2 and 0.5).

Besides, Q square (Q2) can be large (more than 0.35), medium (between 0.15 and 0.25), or small (between 0.02 and 0.15)." Table 4.19: shows the predictive power and predictive relevance of the endogenous latent variables, crises escalations.

As shown in Table 4.20, endogenous latent variables like crises accelerations have both predictive power and predictive relevancy. The main dependent variable, crisis management (CM), shows a satisfactory predictive power and a large predictive relevance in the outcomes of the research. A power of 63.1% can be calculated by looking at the table below, where related R square = 0.631, and related Q square = 0.354. (a relevance of 35.4 percent).

Table 4. 20
Predictive Power and Predictive Relevance of Proposed Model

	Predictive Power		**Predictive Relevance**	
	R Square	Status	Q Square	Stanis
(CM)	0.631	satisfactory	0.354	Large

4.12 Path Coefficient of Research Model Relations

In order to find out if the research hypothesis is correct, it's critical to estimate each relationship's path coefficient value. As stated by Hair et al. (2016); "testing the hypothesis of the study is essential and only can be acquired by estimating the path coefficient values of the different relation within the model. P-values and T-statistics is the commonly used techniques to tests the significance of a relation; T-statistics is the significance of path coefficient and P-value is significant level or probability estimate value. In addition, path coefficient is calculated to reveal the extent level of the relation.

As Hair et al. (2016), the rule of thumbs for assessing the values is; for P-value (probability estimate value), the most common used threshold in psychological research is 0.05 (5%). However, some studies can use the level of 0.01 (1%) or 0.1 (10%). Besides, for T statistics, any value above 1.96 is significant with a two-tailed test or any value above 0.1.65 is significant with a one-tailed test."

In one instruction, the research study relationships can be found, and the ideal evaluation has a single tail. Figure 4.7 depicts the study's T statistics estimates, and Table 4.22 shows the path coefficient assessment with T Statistics and Beta values for the final result variable CM, with the T statistics estimates and beta values CM.

P value scores above 0.05 and t statistics scores above 1.65 are found in the all-variables precedents, indicating a significant relationship. Following the path coefficient value, CA (0.319), CC (0.107), CRE (0.368), and CRS are the most important relationships (0.283).

Table 4. 21
Path Coefficent Assessment of Crisis Management (CM)

	Path Coefficient	**Standard Deviation**	**T Statistics**	**P Value (one tailed)**	**Status**
CA -> CM	0.319	0.050	6.432	0.000	Significant
CC -> CM	0.107	0.033	3.197	0.001	Significant
CRE -> CM	0.368	0.049	7.570	0.000	Significant
CRS -> CM	0.283	0.041	6.902	0.000	Significant

4.13 Assessing Constructs Effective Size f Square of Research Model

When it comes to latent variables, the 2 effect size measures how much of an impact they have. As stated by Hair et al. (2014); "the f^2 effect size is percentage level of impact of a latent variable within a structural model. In simple, the predictive power is calculated for the whole model, then a latent variable is omitted, and the predictive power is recalculated. The difference between the two tests is the effective size of that latent variable on the predictive power of the model."

Besides Cohen (1988) "set a rule of thumb to differentiate the levels of effective size as the following: the f^2 values are small if it has an approximate value of 0.02, The f^2 values are medium if it has an approximate value of 0.15, and The f^2 values are large if it has an approximate value of 0.35."

The findings of the evaluation of the study variables' effective sizes are presented in Table 4.21. The six antecedents for crisis management (CM) have some influence on the outcome variables (CM). The CCR variable has the largest influence, with a f2 score of 0.270, whereas the other four variables all exhibit rather small effects, with values ranging between 0.093 and 0.270.

Table 4. 22
Effective Size Assessment of (CM)

	f2 value for (CM)	**Status**
CA	0.177	medium
CC	0.024	small
CM	-	NC
CRE	0.230	small
CRS	0.160	medium

4.14 Moderation Effects of Technology Usage (TU)

To see how the outcome variable technology usage (TU) affects the path coefficient, look at Table 4.23, which displays the data. For example: There is a 0.017 path coefficient for this CA variable, a T statistic of 1.717 and a P-value of 0.043, a 0.078 path coefficient for this interaction CRE, and a T statistic of 1.717 and a P-value of 0.043 as significant, and a 0.146 path coefficient for this CRS variable, a T statistic of 4.288 and so forth.

Table 4. 23
Moderation Assessment of Technology Usage (TU)

	Path Coefficienl	S1andard Deviation	T Statistic	P Value (one tailed)	Status
CA *TU -> CM	0.017	0.047	0.358	0.360	Non-Significant
CC * TU -> CM	0.048	0.029	1.674	0.047	Significant
CRE * TU -> CM	0.078	0.046	1.717	0.043	Significant
CRS •TU -> CM	0.146	0.034	4.288	0.000	Significant

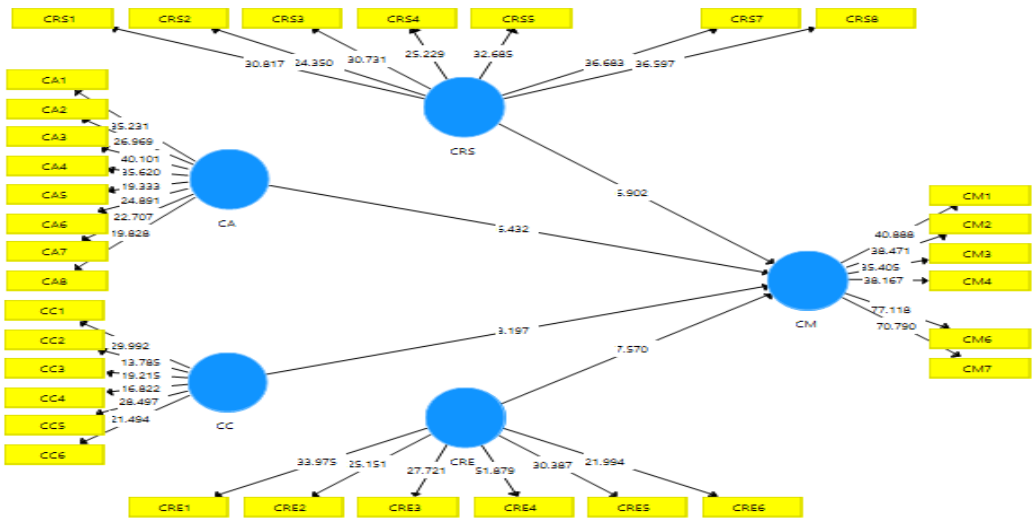

Figure 4. 7 *T Statistics Estimates of the Proposed Model*

4.15 Summary of Relationships Results

As stated in chapter 2 and 3, the study has four direct influence relationships and another 4 moderating influence relationships. Only one moderating relation is not accepted and the following table 4.24 shows the relationship's status.

Table 4. 24
Summary of Hypothesis Acceptance Status

Hypothesis	Argument	Status
HI	There is a positive significant influence from CRS on CM of Drones threats in DIA.	significant
H2	There is a positive significant influence from CA on CM of Drones threats in DIA.	significant
H3	There is a positive significant influence from CC on CM of Drones threats in DIA.	significant
H4	There is a positive significant influence from CRE Oil CM of Drolles threats ill DIA.	significant
H5	TU has a moderatillg impact ill the relatiollship between CRE alld CM of Drones threats in DIA	significant
H6	TU has a moderatillg impact ill the relatiollship between CA and CM of Drones	Non-significant
H7	TU bas a moderating impact in the relationship between CC alld CM of Drones threats in DIA.	significant
H8	TU has a moderatillg impact ill the relationship betweell CR and CM of Drones threats ill DIA.	significant

4.16 Summary

Here, you'll see a summary of the distributed survey results as well as any uncompleted or initial cases for analysis. You'll also see any unengaged screening results as well as any uni- or multivariate screening results. Assuming that all 440 of the distributed cases have been screened and analysed, that leaves 392 collected samples, 15

uncompleted Cases, and 377 initial Cases for analysis, as well as 8 unscreened Cases, 4 univariate Cases, and 1 multivariate Case, and 364 cleaned Cases for analysis.

According to gender, men account for 61% of participants, while women account for 39% of those taking part. The respondents' ages range from 18 to 55, with 11.3 percent being between 18 and 25, 30.8 percent being between 26 and 35, 29.9 percent being between 36 and 45, 17.6 percent being between 46 and 55, and 10.4 percent being over 55.

In terms of respondents' educational background, high school graduates account for 10.7% of respondents, diploma holders account for 22.8%, bachelors account for 51.4% of respondents, postgraduates account for 11.5% of respondents, and others account for 3.6 percent. When it comes to respondents' marital status, singles make up 34.9% of the total, married people make up 54.7%, divorced people make up 4.9%, and widows make up 5.5 percent. When it comes to respondents' work experience, respondents with less than five years' worth of experience account for 30.5% of the total, while those with 10 to 15 years' worth of experience account for 27.7%, and those with more than 15 years' worth of experience account for 10.4%.

When conducting academic research, one of the most important steps is to look at what people think about various variables. Variables such as CRS and CA both have 8 questions (items), followed by CC and its 6 items, before CRE, which has 6 items, and CM, which has 7 items, all have some items, such as CRS and CA both having 8 questions (items) (items). It's easy to see how well you understand each case by looking at the variable's mean value.

In addition, the research's mean value, 364 cases, demonstrates the knowledge of each variable. Various perspectives on descriptive statistics are explored in this study. If you use the Likert 5 scale, you can interpret the results in a variety of ways, from very dissatisfied (1.0-- 1.80) to dissatisfied (1.81-- 2.60) to moderately satisfied (2.61/-3.40) to satisfied (3.41/-4.20) to very satisfied (4.21— 5.0) The study by Salleeh and colleagues (2012).

With a mean value of 3.0170, the CA variable indicates that respondents had a favourable opinion of it. The CC variable's mean value of 3.4421, which represents a high level of satisfaction among respondents, is found.

The CM variable's mean value of 3.0267 shows a high level of satisfaction among respondents. A mean value of 3.2236 for the CRE variable suggests that respondents had a favourable impression of it. With a mean value of 3.2132, the CRS variable demonstrates a high level of satisfaction, demonstrating that respondents had a positive view.

The TU parameter The survey's mean satisfaction rating of 3.4560 revealed that respondents had a positive outlook. In this study's six constructs, the variable TU has the highest mean value and the variable CA has the lowest mean value, demonstrating that respondents are content with their level of perception.

To guarantee that the variables are trustworthy and constant, several measures have been implemented. Indicator reliability (outer and cross loading), internal consistency

(composite reliability), convergence validity (AVE value), and discriminant validity are the first four important steps ("AVE" numbers and Latent Variable Correlations). This study tested eight hypotheses, all of which sought to determine whether there are any direct links between CRS, CA, CC, or CRE, and CM. While at the UAE Airport, TU serves as a moderation relation that is both effective and successful. There is only one non-significant hypothesis among the seven significant hypotheses.

CHAPTER FIVE

DISCUSSIONS, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

Dubai's international airport faces a growing threat from unmanned aerial vehicles (UAVs), according to the study. Final chapter summarizes earlier chapters' discussion on results, objectives, theoretical and practical contributions, research limitations and recommendations for future research in order to provide a concise conclusion.

5.2 Summary of the Study

The primary justification for this study is to determine whether there is a meaningful connection between crisis preparedness, CA, CC, and CRE to CM in the UAE airport. The study is bridging the gaps and enabling this study to be effective in the context of both the available data and its practical applications at the airport in the United Arab Emirates. The research investigated the following goals in order to reach this goal: to evaluate the effect of CRS on the CM of “drones” threats at “DIA”, to evaluate the impact of CA on CM of “drones” threats at “DIA”, to assess the impact of CC on CM of “drones” threats at “DIA”, to evaluate the impact of CRE on CM of “drones” threats at “DIA”, and to examine the moderation TU in the relations towards CM of “drones” threats at “DIA”.

The scope of this research is investigation into determinants and perception of people towards effective in the UAE airport. The study's participants are UAE airport employees, and it examines their perceptions of the airport. The study's findings are particularly useful for airport-related businesses in the United Arab Emirates.

This may have implications for practitioners, owners, policymakers, academics, and researchers in a variety of fields. With an annual increase of 15.5%, DIA opened in 1960 and has since served over 402 million passengers (with one million passengers in 1974, five million in 1990, and 10 million in 1999). With an annual growth rate of 12.4% and total freight volumes of over 17.9 million tonnes, it handled approximately 3.87 million aircraft movements (average growth rate of 14.3 percent annually).

As a result of the airport's continued expansion, a new terminal (the Sheikh Rashid Terminal) opened in 2000, bringing the total annual passenger capacity to 23 million. Furthermore, economic growth resulted in an increase in passenger traffic of over 20 million in 2004 and 34 million in 2007.

DIA handled 89.1 million passengers in 2018, missing its target but remaining the world's busiest for international travellers. The adoption of Unmanned Arial Vehicles (UAV) also known as drones in airports across the globe has both pros and cons. However, the advantages are revenue generation for the airport management itself. Other opportunities created by drones in the airport are the creation of opportunity for private spaced individuals operating within the premises of the airport to operate a commercialized spaceport in which people can be conveyed through drones to nearby locations. The city-state of Dubai is well renowned for its reliance on technology. The

airport is therefore expected to be tightly secured with cutting-edge technology, but given the circumstances, absolute safety cannot be assured.

According to the UAE Ministry of Interior, immigration officers will be obsolete in the UAE by 2020, when artificial intelligence will take their place. Furthermore, with AI-powered security systems, people will be scanned as they walk through, with no need to remove shoes, belts, or empty pockets.

Nevertheless, a clever gate for a virtual tank is already being tested by artificial intelligence at Dubai Airport. One industry with a high likelihood of facing a crisis at any given time is the aviation industry. Literature claims that the industry has experienced a number of assaults over time, including a terrorist attack, drone issues, and political and economic problems that have impacted its operations and functions. This particular study model of managing drone crises in the UAE Airport delivery, CRS, CA, CC, CRE, to CM. While TU, as moderation relation to effective in the UAE Airport. There are several models developed to effectively and efficiently manage crisis, for example the model developed, that deals with communicating CRE to contain or manage crisis events after it has already happened.

However, the nature of this study is to proactively prepare to manage potential crisis that is averting crisis and not facing such crisis. In this chapter, the researcher outlined the research philosophy that assist in selecting the best research method used in collecting data, selecting population and the samples needed. Furthermore, the research framework, and research hypotheses were developed. Besides the items to be

used in data collection were adapted and the chapter proposed the analysis to be used in the next chapter four.

Most of the data will come from the distributed survey, cases that have not been completed, and first-time case studies that will be analysed. situations have been cleared for investigation.

Where the all distributed is 440 case, collected samples 392 case, uncompleted Cases 15 case, initial cases for analysis 377 case, unengaged screening 8 cases, univariate screening 4 case, multivariate screening 1 case, and the cleaned cases for analysis 364 case.

According to gender, men account for 61% of participants, while women account for 39% of those taking part. The respondents' ages range from 18 to 55, with 11.3 percent being between 18 and 25, 30.8 percent being between 26 and 35, 29.9 percent being between 36 and 45, 17.6 percent being between 46 and 55, and 10.4 percent being over 55.

Respondents with a high school diploma represent 10.7% of the total, followed by those with a diploma and those with a bachelor's degree representing 22.8% of the total, followed by those with a postgraduate degree representing 11.5% of the total, and then others representing 3.6 percent. When it comes to respondents' marital status, singles make up 34.9% of the total, married people make up 54.7%, divorced people make up 4.9%, and widows make up 5.5 percent. Those who have worked for less than five years represent 30.5% of those who have worked for between five and ten years

represent 27.7% of those who have worked for between eleven and fifteen years represent 31.3 percent, and those who have worked for more than fifteen years represent 10.4%.

When conducting academic research, one of the most important steps is to look at what people think about various variables. For example, CRS has 8 questions (items), CA has 8 questions (items), then CC has 6 questions (items), then CRE and CRE have 6 questions (items), CM has 7 questions (items), and TU has 5 questions (items). Every variable is made up of some items (items). It's easy to see how well you understand each case by looking at the variable's mean value.

In addition, the research's mean value, 364 cases, demonstrates the knowledge of each variable. Various perspectives on descriptive statistics are explored in this study. It can be very dissatisfied (1.0-- 1.80) or dissatisfied (1.81-- 2.60) on the Liker 5 scale, moderately satisfied (2,61–3.40) or satisfied (3.41–4.20) on the Liker 5 scale, or even extremely dissatisfied (Salleeh et al,. 2012). When it comes to the CA variable, the mean value of 3.0170 shows that respondents are satisfied, reflecting a positive attitude.

The broad consensus is supported by the CC variable's mean value of 3.4421, which demonstrates that respondents are satisfied. With a mean value of 3.0267, the CM variable demonstrates a high level of satisfaction, demonstrating that respondents had an optimistic view.

The CRE variable's mean value is 3.2236, which means that respondents generally think favourably of it. The CRS data show that, at 3.2132 points, the mean degree of satisfaction is high, reflecting the optimistic sentiments of the respondents. With a mean value of 3.4560, the TU variable demonstrates a high degree of satisfaction and the optimistic outlook of the respondents.

The six constructs of this study's respondents indicate a high level of satisfaction, with the variable TU having the highest mean value and the variable CA having the lowest mean value. A number of measures have been implemented to guarantee the reliability and consistency of variables. The process is concluded by collinearity analysis (also known as "Variance Inflation Factor" or "VIF"), which comes after indicator reliability (outer and cross loading), internal consistency (composite reliability), convergence validity (AVE value), and discriminant validity (AVE numbers and Latent Variable Correlations).

In this study, eight hypotheses were evaluated, all of which were intended to examine the direct relationships between CRS, CA, CC, CRE, and CM. In the UAE Airport, however, moderation is related to effectiveness. Only one hypothesis is non-significant, and the remaining seven are all significant.

5.3 Discussion of Research Hypotheses

The eight hypotheses were tested in this study, all hypotheses are to test direct relations between CRS, CA, CC, CRE to CM. While TU, as moderation relation to effective in the UAE Airport. The tables bellow will cover all hypothesis testing and statistics related to it.

- H1: There is a positive significant influence from CRS on CM of Drones threats in DIA.

CRS and CM of Drones threats at DIA are linked, according to the first hypothesis. Also, we can say that the relationship between crisis readiness and CM was taken into consideration as a significant relationship with a positive effect because of the Path Coefficient for this variable being 0.283. The Effective Size score for this variable is 0.160. The T-statistics score is 6.902. H1 is important in the grand scheme of things. Table 5.1 illustrates this point:

Table 5. 1
Findings of Relationships between Crisis Readiness (CRS) and Crisis Management (CM)

#	Relation	Status	Sign	Path Coefficient	Effective Size	T-statistics	P-Value
H1	CRS -> CM	significant	Positive	0.283	0.160	6.902	0.000

Note: *Crisis Readiness = CRS, Crisis Management = CM*

- H2: There is a positive significant influence from CA on CM of Drones threats in DIA.

Another theory holds that there is a connection between drone threats at DIA and the Civil Aviation Authority (CA). We can conclude from these results that there is an important relationship between CA and CM with a positive impact (P=0.000) and that the Path Coefficient is 0.319, the effective size score is 0.175, the T-statistics score is 6.432, and the P-value is 0.000. H2 is significant when taken as a whole. Table 5.2 displays the results.

Table 5. 2
Findings of Relationships between Crisis Awareness (CA) and Crisis Management (CM)

#	Relation	Status	Sign	Path Coefficient	Effective Size	T-statistics	P-Value
H2	CA -> CM	significant	Positive	0.319	0.177	6.432	0.000

Note: Crisis Awareness = CA, Crisis Management = CM

- H3: There is a positive significant influence from CC on CM of Drones threats in DIA.

A third hypothesis holds that there is a connection between the CC and the CM of the drone threats at DIA. This is true. Based on the Path Coefficient of this variable being 0, we can conclude that the relationship between the two variables (CC and CM) has a significant positive influence, with an effective size score of 0.024, T-statistics being 3,197 and the P-value being 0.001. H3 as a whole is significant. Table 5.3 shows this information.

Table 5. 3
Findings of Relationships between Crisis Control (CC) and Crisis Management (CM)

#	Relation	Status	Sign	Path Coefficient	Effective Size	T-statistics	P-Value
H3	CC -> CM	significant	Positive	0.107	0.024	3.197	0.001

Note. Crisis Control = CC, Crisis Management = CM

- H4: There is a positive significant influence from CRS on CM of Drones threats in DIA.

Fourth, there's a link between CRS and the CM of drone threats at DIA, according to the theory. Based on the Path Coefficient, effective size, T-statistics and P-value for this variable (all of which are 0.000), we can say that CRE's partnership with CM is a significant one with a positive effect. H4 is a sizable amount of money in total. Table 5.4 demonstrates this.

Table 5. 4
Findings of Relationships between Crisis Response (CRE) and Crisis Management (CM)

#	Relation	Status	Sign	Path Coefficient	Effective Size	T-statistics	P-Value
H4	CRE -> CM	significant	Positive	0.368	0.230	7.570	0.000

Note. Crisis Response = CRE. Crisis Management = CM

- H5: TU has a moderating impact in the relationship between CRS and CM of Drones threats in DIA

TU has a moderating effect on the relationship between CRS and CM of drone threats in Dubai's international airport, according to hypothesis 5. In other words, the Path Coefficient for this variable is 0.146, the effective size score is 0.160, the T-statistics score is 4.288, and the P-value is 0.000. Based on these results, we can conclude that government intervention has a moderating effect on the relationship between TU and CRS, which is considered a significant relationship with a positive impact. H5 is important in the grand scheme of things. Table 5.5 shows the results.

Table 5. 5

Findings of Technology Usage (TU) Moderating Impact (1)

Hypothesis	Relation	Status	Sign	Path Coefficient	Effective Size	T-statistics	P Value (one tailed)
H5	CRS * TU -> CM	significant	Positive	0.146	0.160	4.288	0.000

Note; *Technology Usage = TU, Crisis Readiness = CRS, Crisis Management = CM*

- H6: TU has a moderating impact in the relationship between CA and CM of Drones threats in DIA.

As the sixth hypothesis states, the relationship between drone threats at Dubai's international airport is moderated by TU. There is a moderating effect in this relationship between TU and CA and CM when viewed as a non-significant but positive relationship. Based on these results, we can say that the relationship between TU and CA and CM has a moderating effect. The Path Coefficient for this variable is 0.017, and the effective size score is 0.177. H6 is of no significance in the final analysis. In accordance with Table 5.6,

Table 5. 6

Findings of Technology Usage (TU) Moderating Impact (2)

Hypothesis	Relation	Status	Sign	Path Coefficient	Effective Size	T-statistics	P Value (one tailed)
H6	CA * TU -> CM	Non-Significant	Positive	0.017	0.177	0.358	0.360

Note; *Technology Usage = TU, Crisis Awareness = CA, Crisis Management = CM*

- H7: TU has a moderating impact in the relationship between CC and CM of Drones threats in DIA.

Drone threats to Dubai's international airport have been hypothesized to be moderated by TU in seven different ways. With respect to this variable, the Path Coefficient (Path) is 0.048, effective size (Effect Size), T-statistics score (Tstats), and P-value (Potential) are all positive, so we can conclude that there is an influence from the relationship between TU and CC/CM that moderates the impact of the positive P-value. H6 is important in the grand scheme of things. Table 5.7 demonstrates this.

Table 5. 7
Findings of Technology Usage (TU) Moderating Impact (3)

Hypothesis	**Relation**	**Status**	**Sign**	**Path Coefficient**	**Effective Size**	**T-statistics**	**P Value (one tailed)**
H7	CC * TU -> CM	Significant	Positive	0.048	0.024	1.674	0.047

Note; *Technology Usage = TU, Crisis Control = CC, Crisis Management = CM*

- H8: TU has a moderating impact in the relationship between CRE and CM of Drones threats in DIA.

TU has a moderating effect in relation to CRE and CM of Drones threats in DIA, according to the eighth hypotheses. For this particular variable, the Path Coefficient is 0.078, the effective size score is 0.230, the T-statistics score is 1.717, and the P-value is 0.043. Based on these results, we can conclude that TU has a moderating effect on the relationship between CRE and CM, which is considered to be an important

relationship with a positive impact. H8 is of no consequence in the grand scheme of things. As can be seen in Table 5.8, below.

Table 5. 8
Findings of Technology Usage (TU) Moderating Impact (4)

Hypothesis	Relation	Status	Sign	Path Coefficient	Effective Size	T-statistics	P Value (one tailed)
H8	CRE * TU -> CM	significant	Positive	0.078	0.230	1.717	0.043

Note; *Technology Usage = TU, Crisis Response = CRE, Crisis Management = CM*

5.4 Research Objectives Discussions

The study have five objectives, and the discussions related to every objective is as the following:

Objective 1: To Assess the Impact of Crisis readiness on CM of Drones 'Threats at DIA.

The result concurs with the literature review regarding crisis readiness on CM of drones 'threats at DIA. However, the results also indicated that there was significant to CM on the issue regarding the DIA being clear about how their performance is to be measured. Crisis readiness can be influenced significantly by human resource management (HRM), organization structure (including the organization unlearning factor), and organizational strategies (including those mentioned above). CM procedures put in place to contribute to the occurrence of crises in various situations have people concerned.

Keeping in mind that one of the major factors contributing to the escalation of crises is the failure to take human behaviour into account when developing protocols for crisis management. Many businesses do not understand the significance of being proactive when it comes to crisis management. While the organization's crisis readiness, which felt fully prepared to deal with potential crises effectively and efficiently, did not achieve the desired result.

The reason for this is because, the chain of command that is inadequate throughout crises, supervisor's knowledge. The relevance of logistics readiness that is, supplying the required details exact descriptions of where as well as how the event occurs along with situation awareness in managing crises.

Moreover, from recognizing the scenario, sufficient prep work to properly and manage crisis had been the main matter of CM that take part in responding to crises occasions. The observed results from the strategy to consist of and take care of anticipated impact of the crisis readiness do fail to achieve its designated goals, this is as a result of significant aspects specifically; the materials 'technical' and also human aspects.

Additionally, the variables' study relationships were gleaned from the aforementioned studies, which were crucial in the model's development. Questionnaires were created using existing research and have been validated using multiple regression analysis and structural equation modelling to determine whether they are accurate (SEM).

The crisis readiness (CRS) is significant status such as, the relation measure in progressive presentation is CRS (0.160). Table 5.9 is illustrating the result effect of the variables in the variance crisis readiness (CRS).

Table 5. 9
Result of Predictive Variables on Crisis readiness (CRS)

No	Variable	Status	Effective Size	T- statistics
01	Crisis readiness (CRS)	significant	0.160	6.902

It's important to recognize that a crisis can occur at any time and have a wide range of effects on individuals, teams, communities and entire cultures, depending on how it's handled. In contrast, crisis readiness refers to a company's treatments, plans, and operations, all of which are designed to ensure that the company is always ready to deal with any given situation (Bowen et al., 2018; Thapa et al., 2017). CM, on the other hand, is the procedure by which a business deals with an unexpected and turbulent event that threatens to harm the business or its stakeholders (Bryan et al., 2018; Van de Walle et al., 2016).

The term "crisis" refers to any event that has the potential to cause an unpredictable and harmful scenario that affects a person, team, neighbourhood, or entire culture. the ability to deal with any crisis that may arise in the company or company, while crisis readiness refers to the treatments, plans, and operations put in place to be constantly ready to do so (Bowen et al., 2018; Thapa et al., 2017). A company's contingency management (CM) process is used when an unexpected and turbulent event threatens to harm the company or its stakeholders (Bryan et al., 2018; Van de Walle et al., 2016).

Objective 2: To Evaluate the Impact of CA on CM of Drones 'Threats at DIA

The result concurs with the literature review regarding CA on CM of drones 'threats at DIA. The findings which were looking at answering the issue regarding the CA, implementation on CM agreed with the statement that appraisal system add value towards the CM of drones 'threats at DIA. The literature review found that gender differences, affect CM, which could be extended to satisfaction. However, the results also indicated that technological usage was significant to Drones 'threats at DIA on the issue regarding CA on CM being clear about how their performance is to be measured.

The mindful of crises suggests there is a possibility of controlling or covering the possible crises. The CA may not straight imply that the performer has the complete understanding of the possible crises, yet should be able to recognize the refined hints, for managing a crisis is understanding the full extent of what's happening, this is basically regarding awareness of the situation.

The airport security officer is strolling her beat, and witnesses a security violation occurring, in a scenario such as this, access to important information can noticeably improve the officer's situational awareness so she can respond in a suitable way. Airport security department might have a log of current criminal activity in an area, supplying them with a jump beginning on identifying prospective suspects.

Questionnaires were created using existing research and have been validated using multiple regression analysis and structural equation modelling to determine whether they are accurate (SEM).

The CA relations is significant status such as, the relation measure in progressive presentation is CA (0.177). Table 5.10 is illustrating the result effect of the variables in the variance of CA.

Table 5. 10
Result of Predictive Variables on Crisis awareness (CA)

No	Variable	Status	T Statistics	Direct Effect
2	Crisis awareness	significant	6.432	0.177

With the most recent understanding of what drives crisis communication readiness and how businesses can manage an effective response, CA offers its clients a competitive advantage (Hymeniuk & Melnychuk, 2017; Janssen & van der Voort, 2020). Employees who keep the company's efforts going in the face of a crisis or interruption need to be trained (Basiry & Ghasem-Aghaee, 2016; Hymeniuk & Melnychuk, 2017). While CM is concerned with identifying threats to a company and its stakeholders, it is also concerned with the techniques used by the organization to manage these risks (Czerniak et al., 2016; Kostyuchenko et al., 2018). Organizations frequently develop a CM strategy to reduce unpredictable outcomes in emergency situations (Mason et al., 2018; Rothkrantz & Fitrianie, 2018).

Many researchers have found that CA helps to make a superior awareness of any question or crisis that the firm may face, as well as CA helps to deal with it and this will lead to a better CM of drone's threats in DIA (Basiry & Ghasem-Aghaaee, 2016; Czerniak et al., 2016; Rothkrantz & Fitriane, 2018; Ruquan, 2017; Xinquan, 2016). (Humanson & Nordeman, 2017; Mason et al., 2018; Ruquan, 2017).

The researcher believes that CA will have a significant impact on the CM of drone threats at DIA as a result of this. Other hypotheses, such as; are consistent with and compatible with this hypothesis (Bacon et al., 2017; Heide & Simonsson, 2019; Hengartner, 2018; Shi & Li, 2020).

Objective 3: To Assess the Impact of CC on CM of Drones 'Threats at DIA.

The findings are in line with a review of the literature on the impact of drones on the DIA's CC and CM. Recognizing that effective CC is built on human ability to recognize and correct mistakes is a fact of planning action. It's critical in CC practice for emergency response organizations to communicate clearly and coordinate their actions.

Furthermore, the CC level of common details amongst the various establishments and territories joining calamity processes at various sites, so all performers voluntarily recognize the restrictions on each and the imaginable mixtures of cooperation as well as support amongst them under a given collection of problems. Nonetheless, the CC is normally completed through usual exercise, ages of communal knowledge, as well as professional communication among private disaster situation feedback employees.

The questionnaire was prepared based on a survey of the literature, and the relationships linked with this aim are direct relationships obtained by multiple regression analysis by using structural equation modelling (SEM). The CC connections have considerable standing, for example, the relationship measure in progressive presentation is CC (0.036). Table 5.11 depicts the influence of the factors on the variance of CC.

Table 5. 11
Result of Predictive Variables on Crisis control (CC)

No	Variable	Status	T Statistics	Direct Effect
3	Crisis control	significant	10.184	0.036

As previously stated, a problem is anything that results in an unstable and dangerous situation for a person, a group, a community, or the entire society (Nizamidou & Vouzas, 2020; Zade et al., 2018). To keep it under scrutiny and well-maintained and prevent it from growing ever larger, CC is a technique that will undoubtedly be used in times of crisis (Cutri et al., 2020; Schrader & Laaser, 2019a).

When compared to CM, which aims to reduce the impact of an unexpected emergency on an organization's service while developing and implementing methods to do so (Schrader & Laaser, 2019b; Stevens, 2017).

As CC keeps the firm driving the crises to solution and overcoming it, this will lead to a better control of drone threats in DIA, many researchers believe. CC will help determine all dimensions of the crisis and where to start fixing the problems that the firms face (Ang et al., 2020; KAYAOGLU & Williams, 2020; Sezgin et al., 2020; Stevens 2017). Sezgin and colleagues (2019; Schrader & Laaser, 2019a) and Al-Zaqba (2019) all support this idea.

On the basis of this, the researcher expects CC to have a significant positive impact on the CM of drone threats at DIA. According to other studies like, this hypothesis is also

consistent and compatible with; (Ang et al., 2020; Cutri et al., 2020; KAYAOGLU & Williams, 2020; Schrader & Laaser, 2019b, 2019a; Sezgin et al., 2020; Stevens, 2017).

Objective 4: To evaluate the impact of CR on CM of drones 'threats at DIA.

The result concurs with the literature review regarding CRE on CM of drones 'threats at DIA. A CRE is usually taken into consideration an unpredictable occasion that can possibly create adverse results and may threaten corporate reputation.

The organization requirement to successfully communicate with the general public regarding CRE to safeguard themselves from reputational decrease. The initial CRE s (base feedbacks) include instructing details (what took place, how the situation may affect the public, and also what the public should do) as well as changing information (what the organization is doing to stop a repeat of the dilemma).

Reputation repair work strategies can be made use of to repair or stay clear of any kind of reputational damages. Base reactions are needed for all crises and also can be combined with reputation repair strategies, base reactions have actually gotten little attention in previous research studies.

Numerous researches have actually focused much more on online reputation repair than on base reaction or no reaction. It is important to understand the effects of different types of CRE strategies.

The questionnaire was prepared based on a survey of the literature, and the relationships linked with this aim are direct relationships obtained by multiple

regression analysis by using structural equation modelling (SEM). CRE relationships have considerable significance, for example, the relation measure in progressive presentation is CRE (0.230). Table 5.12 depicts the influence of the factors on the variance of CRE.

Table 5. 12
Result of Predictive Variables on Crisis Response (CRE)

No	Variable	Status	T Statistics	Direct Effect
4	Crisis Response	significant	7.570	0.230

CRE describes all of the breakthrough planning and activities that are required to manage with natural and man-made tragedies, circumstances, essential occurrences, and unfortunate events, among other things (Amade et al., 2018; Chiauzzi & Newell, 2019; Mustafaoğlu et al., 2018).

The less damage is done the faster the reaction is (Jordana & TrivioSalazar, 2020; Malyshev et al., 2018). According to CRE, crisis response is defined as what monitoring says and does once a crisis occurs (Bowen et al., 2018; Thapa et al., 2017). Also known as contingency planning, crisis management (CM) is the process of preparing for and managing any unexpected or turbulent emergency conditions that have an influence on a company's business or operations (Bowen et al., 2018; Bryan et al., 2018; Jahng & Hong, 2017; Kim & Park, 2017; Van de Walle et al., 2016).

As a result, and according to numerous researchers, including (Bryan et al., 2018; Jordana & TrivioSalazar, 2020; Kriyantono & McKenna, 2019; Savonen et al., 2018; Wang & Kuo, 2017), CRE will assist in resolving issues that arise as a result of crises

and will prevent crises from growing larger and larger, resulting in a better CM for drone threats at (Brancaccio et al., 2019; Desai et al., 2020; Hymeniuk & Melnychuk, 2017; Kriyantono & McKenna, 2019; Nguyen et al., 2016; Qadir et al., 2016).

And on the basis of that, the researcher expects CRE to have a significant positive direct impact on the CM of drone threats at Dubai International. Other hypotheses, such as; are consistent with and compatible with this hypothesis (Basiry & Ghasem-Aghaee, 2016; Bodó et al., 2017; Bryan et al., 2017; Czerniak et al., 2016; Hymeniuk & Melnychuk, 2017; Janssen & van der Voort, 2020; Kostyuchenko et al., 2018; Mason et al., 2018).

Objective 5: To examine the moderation TU in the relations towards CM of drones 'threats at DIA.

The result concurs with the literature review regarding the moderation TU in the relations towards CM of drones 'threats at DIA. The role of technological opportunities in CM is as an interdisciplinary research study location that explores the interconnectedness of people, organizations, information and technology during crises.

As, there was an absence of recognition of as well as interaction with these crisis apps amongst the participants in our study, though most of them acknowledged the usefulness of crisis informatics technology.

The questionnaire was developed based on literature review, and the relations associated with this objective is direct relations, which acquired by multiple regression analysis by using structural equation modelling (SEM). The moderation TU in the

relations towards CM relations is significant status such as, the relation measure in progressive presentation as Table 5.13 is illustrating the result effect of the variables in the variance of TU.

Table 5. 13
Result of Predictive Variables on Technology Usage (TU).

No	Variable	Status	T Statistics	Direct Effect
5	CA * TU -> CM	Non-Significant	0.358	0.177
	CC * TU -> CM	Significant	1.674	0.024
	CRE * TU -> CM	Significant	1.717	0.230
	CRS * TU -> CM	Significant	4.288	0.160

Overall, technology can be characterized as entities, both material and immaterial, that are generated by expending physical and psychic effort in order to attain some form of monetary or nonmonetary benefit (Chiauzzi & Newell, 2019; Offermann-van Heek & Ziefle, 2019).

As used in this context, technology is defined as gadgets and machines that are capable of being put to good use in the context of solving real-world problems. Risks to an organization and its stakeholders are identified, and the strategies utilized by the corporation to mitigate these threats are documented in corporate risk management (Amade et al., 2018; Upadhyay et al., 2018).

Organizations typically develop a CM strategy to reduce uncertainty in the event of a crisis (Kim & Park, 2017; Malyshev et al., 2018). All independent variables expected

to have a direct impact on CM, on the other hand, were described in the previous hypotheses and were found to be true.

The studies found that TU moderates the relationship between CM and some of the study variables (Bowen et al., 2018, Claeys & Coombs, 2020, Jahng & Hong, 2017), as well as between CM and Jordana and Trivio-Salazar (2020), Khairuddin (2016, 2018), Savonen (2018), and Upadhyay (2018). (Bruwer, 2016; Bruwer et al., 2018; Hashemy et al., 2016; Mwakaje, 2018; Seko et al., 2017).

Accordingly, the researcher expects TU to have an important moderating effect on the association among the study's independent variables and CM. Furthermore, this hypothesis is in line with other hypotheses that have been put forth in other studies, including; (Allen et al., 2016; Fariz et al., 2016; Hersona & Sidharta, 2017; Hitt & Tambe, 2016; Kheng & Muthuveloo, 2019; Kiatsuranon & Suwunnamek, 2017; Laury, 2019; Lee et al., 2016; J. J. Li et al., 2017; X. Li, 2020; Muhammedrisaevna et al., 2020; NGOMA, 2018; Syamsir, 2020; Wahab et al., 2020; Wardani, 2019; Wijermans et al., 2016; Yun & Yoo, 2017).

5.5 Research Contributions

According to the study contributions in this research study stating have been made with the research for managing drone crises at the airport an investigation into UAE Airport. The study findings have added to factors of DIA for CM.

Contributions made have actually been specific to areas of perception of CM towards effective drone crises at the airport an investigation into UAE Airport, the factors of

study are crisis readiness, CA , CC , CRE, to CM. While TU, as moderation relation to effective in the UAE Airport.

The contributions to the situational CC theory, common alerting protocol (CAP), which is associates with improving managing drone crises at the airport: An investigation into UAE Airport. Acknowledging systems that might be made use of for learning and determining exactly how the organizations follow as well as execution is a significant contribution to concept in addition to technique.

In the recovery phase, one useful tool is the situational CC theory. There is a theory that says how stakeholders view a crisis and an organization depends on who they believe is to blame. Consequently, organizations can attempt to safeguard their reputation and legitimacy by reducing the perception among stakeholders that the organization is responsible for the occurrences.

The primary factor that stakeholders take into account when determining their perception of the organization's responsibility for the event is the type of the event. The idea behind this program fits perfectly well to this research context that is, awareness creation by gathering intelligence or cues about the potential crisis, in this case, potential crisis by drones and relaying how the potential crisis can be contained or managed even right before it happens that is, crisis aversion.

According to the contributions to principle that, while existing literature testimonial explained that prepared activities in drone crises at the airport UAE, the implementation and also devices which connects with in CM practice within each

individuals and authorities service at airport UAE for identifying, remembering and also using discovered new to idea which can be additionally discovered by future researchers.

The standards for CM at drone crises at the airport UAE, also a contribution to framework considering that it was developed using this research findings as well as aspects specifically investigated for the objective of this study extent. Contributions to practice is this research study along with from the standards it has been developed that CM is required for dealing properly with drone crises at the airport UAE from previous events require to have systems for remembering as well as utilizing technical practices. According to the contributions discovered to model of research as well as practice are vital for proceeding this aspect for managing drone crises at the airport UAE along with response particularly in the CM preparation, where there is need to enhance the interaction to the CM.

These contributions validate the rationale for performing this research study, as well as offer as benefit for improving this field. This study contribution to both scholastic as well as specialist domains as the sticking to.

- The proposed design is one-of-a-kind and also none of the previous research have this thorough version.
- Due to the fact that the products have actually been tested for validity and reliability and also can be utilized by others, the questionnaire developed for this version is another contribution.
- Resulted shows that the moderation effects to CA have non-significant impact.

5.6 Limitations

This study, has a number of limitations and which is the very important some suggestions which should be considered for conducting future research as follows:

- As recorded in chapter four, this study used only the sample comprised of relatively CRS, CA, CC, CRE, to CM. While TU, as moderation relation to effective in the UAE Airport, so therefore the findings could not be applied to other organizations or in another country. In addition, it is not clear if the results could be generalized to managing drone crises at the UAE Airport.
- Consequently, the limitation of this study is replicated by using to different organization at different levels in UAE, or other countries, the benefit of generalizing the results would be increased and the understanding of this study issues could be enhanced and improving.
- The responding in this research, are numerous various categories, which was hard to easily generalize the results to all kinds of organization. Thus, an additional future study may consider the prospective effect Perception of CM and managing drone crises at the airport UAE relationships checked out by this research.
- This study relied only on a questionnaire survey as the primary data collection method, which was quantitatively analysed using proper statistical techniques. As a result, the use of this technology adds additional constraint to our investigation.
- Other limitations in this study, the sample was chosen based on the objectives only investigation into determinants and perception of people towards effective CM, therefore caution is needed when trying to implantation the results in the different organizations.

- The collection data, which was related to the methodology of this research, of origin in between the research study's variables could not be presumed from the results of the regression evaluation, with the exception of a declaration that the results were according to the theories discussed in the research, and thus far more treatment should undoubtedly be used in managing them.
- To describe origin by means of words like, 'affect', and also 'influence', as used by this research study, require to be thoroughly translated. Practical extra study is by looking into as well as evaluating causal connections in between variables. In UAE Airport, the researcher encounters some difficulties related the security

5.7 Recommendations for Future Studies

The research advises that an investigation into the awareness and readiness in managing drone crises at the UAE Airport to improve effectiveness and also performance of the organization and also speed in responding to growth. The administration of investigation right into factors as well as assumption of people towards effective CM the objective, business and vision well worth's. This will absolutely minimize resistance from personnel and also in still an organization culture. The TU implementation the necessity for too many levels, which may cause personnel in various qualities doing comparable tasks and thinking very same responsibilities. The CM between CRS, CA, CC, CRE, to CM at UAE Airport have more comprehensive bands with alternative forms of inspiration, for instance, the private team efficiency. The study advises that CM must improve grades of team.

There is a skills-gap amongst personnel in terms of CM in airport UAE. This study considers about correct effective drone crises at the airport analysis to identify core capabilities, expertise, skills, and capabilities needed for each and every task. This ought to also bear cognizance of the core worth's of the organizations, such as honesty, professionalism and reliability. CM must prepare and manage their programs. The CM use efficiency administration systems. Establish mechanisms to get responses from personnel and other client on the adjustment procedure.

In addition, leading administration of effective CM to provide monitoring and also guidelines in the adjustment procedure. The CM demands to make it possible for a great deal more adaptability to effective drone crises at the airport, so as not to hinder its operations. There is need for legal adjustments to allow effective CM much better the right to keep. Outcomes of the research study open the complying with instructions for more investigation in academic research study.

The research study results is limited to CM in drone crises at the airport UAE context, Therefore, duplicate the same design in various other environment to guarantee the connection make contrasts and without a doubt making generalizations of the relationships rates by scholars.

The study is focusing on crucial aspects of CM in drone emergencies at the airport in the United Arab Emirates. Other acts like commitment and total pleasure, together with its antecedents, might increase the value of the established design.

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APPENDICES

QUESTIONNAIRE

IMPACT OF AWARENESS, READINESS, CONTROL, RESPONSE, AND TECHNOLOGY USAGE ON CRISIS MANAGEMENT OF DRONES THREATS IN DUBAI INTERNATIONAL AIRPORT

Please note that your responses are anonymous and confidential and will be used by the researcher only for the purposes of research. There are no right or wrong answers. Please answer all questions to the best of your knowledge.

Please indicate (by ticking the appropriate box) the extent to which you agree or disagree with each of the statements from captions "Crisis Awareness (CA), Crisis Control (CC), Crisis Response (CRE), Crises Readiness (CR), Technology Usage (TU) and Crisis Management (CM)".

The following scale is applied for all statements:

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly agree
1	2	3	4	5

Section A: ***Crisis Management***

No.		Agreement Level				
1	Crisis personnel needs to have foresight about potential crises	1	2	3	4	5
2	To effectively manage drone crises, I believed anti drone technology should be installed at Dubai's airport	1	2	3	4	5
3	Disclosing information about potential crises can enhance managing efficiently and effectively potential drone crises	1	2	3	4	5

4	To effectively and efficiently manage potential drone crisis in Dubai airport, the CM team must be experts in crisis management	1	2	3	4	5
5	To effectively and efficiently manage potential drone crisis in Dubai airport, the CM team must be experts in risk management	1	2	3	4	5
6	I believe that in making proactive polices, operational managers must be involved in the decision making	1	2	3	4	5
7	To effectively and efficiently manage drone crisis, crisis plan must be communicated to all employees in the company	1	2	3	4	5

Section B: Crisis Awareness

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly agree
1	2	3	4	5

No.		Agreement Level				
1	I am aware that residents in this area have the right to flight their unmanned aerial vehicles	1	2	3	4	5
2	I believed that flying drones in proximity to the airport is dangerous	1	2	3	4	5
3	I am aware that flying drones in areas such as airport pose no dangers to the health of airport commuters	1	2	3	4	5
4	It is logical to connect every unrelated abnormal information as potential crises	1	2	3	4	5
5	Connecting every abnormal information make sense to predict potential crisis	1	2	3	4	5
6	Getting timely information about potential event increases the chances of effectively and efficiently managing crisis	1	2	3	4	5

7	Understanding what went wrong will save the organization from potential crisis	1	2	3	4	5
8	I am well informed about the crises flying zone in the airport can caused	1	2	3	4	5

Section C: Crisis Readiness

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly agree
1	**2**	**3**	**4**	**5**

No.		Agreement Level				
1	I believe the collaboration between departments can enhance the outcomes of crisis readiness	1	2	3	4	5
2	In setting crisis readiness plan, the policy makers should consider human error as one of the major factors.	1	2	3	4	5
3	I believed the airport managers made significance preparation to tackle drone crises if in case it happens	1	2	3	4	5
4	To ensure safety of the airport commuters, drone flying around the airport facilities should be discouraged	1	2	3	4	5
5	CM personnel should be effectively trained on how to contain drone crisis events	1	2	3	4	5
6	Data about previous crises from related industry should be accurately analyzed so as to create an effective readiness plan	1	2	3	4	5
7	Dubai airport should from time to time scan the restricted environment to drones for potential violations	1	2	3	4	5
8	Crisis personnel should be trained on how to crash spotted drone within the restricted airport facilities	1	2	3	4	5

Section D: Crisis Control

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly agree
1	2	3	4	5

No.		Agreement Level				
1	The organization have a permanent response team for crisis situations	1	2	3	4	5
2	The team of CRE is performed from the most qualified and effective employees	1	2	3	4	5
3	In critical or crisis situation, the decision making is done on time	1	2	3	4	5
4	In critical or crisis situation, the decision making is taken by proper persons	1	2	3	4	5
5	In critical or crisis situation, the decision making is considering the needs of external stakeholders	1	2	3	4	5
6	The decisions are always in a high level of acceptance from employees	1	2	3	4	5

Section E:
Crisis Response

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly agree
1	2	3	4	5

No.		Agreement Level				
1	The organization has a strong information for all the possible threats and crisis attributions	1	2	3	4	5
2	The organization has a response roadmap for every possible threat or crisis	1	2	3	4	5
3	The organization has a contingency plan for sustaining the core services in any condition	1	2	3	4	5
4	All managers know well the strategies and the roles in the critical or crisis	1	2	3	4	5
5	Pro-active not rec-active is part of the organization culture at all management levels	1	2	3	4	5
6	In the case of crises occurrence, there is a specialized team to deal directly with the situation.	1	2	3	4	5

Section F: Technology Usage

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly agree
1	2	3	4	5

No.		Agreement Level				
1	The use of technology is perceived as policing apparatus to monitor suspected threats who might cause crisis	1	2	3	4	5
2	High technology usage at the airport area can effectively reduce the drones' threats	1	2	3	4	5
3	Technology usage in the airport is mainly used to identify illegal objects in the airport area	1	2	3	4	5

4	The use of technology in monitoring drones at the airport is used to develop more security apparatus	1	2	3	4	5
5	Dubai airports have the technical equipment's to detect and deal with illegal drones	1	2	3	4	5
6	The use of technology is perceived as policing apparatus to monitor suspected threats who might cause crisis	1	2	3	4	5
7	High technology usage at the airport area can effectively reduce the drones' threats	1	2	3	4	5
8	Technology usage in the airport is mainly used to identify illegal objects in the airport area	1	2	3	4	5

Part II

Demographics

Please provide us with some basic information about the firm and yourself.

Age of respondent

a) 18-25 years **b)** 26-35 years **c)** 36-45 years

d) 46-55 years e) Above 55 years

Gender

a) Male **b)** Female **c)** Other

Education of respondent.

a) High School **b)** Diploma **c)** Bachelor d) Postgraduate

e) Others

Marital Status.

a) Single **b)** Married **c)** Widows **d)** Divorced

Number of years of experience in your current job function.

a) Less than 05 years **b)** 05-10 **c)** 11-15

d) 16 and above

Thank you very much for your cooperation