



# Impact of Crisis Management Practices on the Effectiveness of Crisis Management of Drones Threats in Dubai International Airport

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## ABSTRACT

The aim of the study is to examine the impact of the crisis management practices (readiness, crisis awareness, crisis control, crisis response) on effective crisis management in Dubai Airport. The study belongs to positivism philosophy, deduction approach, quantitative methodology, empirical survey passed study, used cross-sectional data, and data is original. The target or study population chosen for this research is the total number of employees, both senior and junior staff working at the Dubai international airport. The reason for this is that if crises stuck, all will be affected, and they have a big role to play in managing crises. The actual sample size is 364 employees, and the distributed survey is 440, which is distributed by using face-to-face data collection methods in a convenient technique of sample selection. Overall, direct relationships for the four predictors of crisis management are significant; The precedence for the relations based on the path coefficient value is crisis awareness (0.319), crisis control (0.107), crisis readiness (0.368), and crisis response (0.283). Replicating the study in other airports is recommended to have a better generalization.

## KEYWORDS

Crisis Awareness, Crisis Readiness, Crisis Control, Crisis Response, Crisis Management, Drones Threats, Dubai International Airport

## INTRODUCTION

The crisis is one of the unpredictable natural phenomena that happen at any point in time, even when pre-emptive measures are put in place (Pedersen et al., 2020). Moreover, the crises can either be natural or man-made; also, they can occur from lapses in the pre-emptive measures set in place to alleviate the well-known crises (Sandin, 2018; Sehrawat & Roy, 2021). However, the attempt to reduce flooding by creating a big dam might lead to tribal or community wars because no tribe will be willing to let go of their land. Therefore, before organizations can be successful in pursuing their long-term goals, the ability to manage crises is a necessary tool for managing and sustaining continuous success (Koushafard, 2013). Moreover, the ability of management to put several prevention mechanisms in place is known as proactiveness. Nevertheless, when crises happen, the strategies mostly employed by organizations to manage crises include confrontation, escaping, corporation, and containment strategies (Ghazi, 2017).

In organizations, the ability to resolve crises in an effective, efficient and timely manner is the heart of organizational responsibility (Kluge et al., 2018; Koronis & Ponis, 2018). Crisis management becomes an issue when there are numerous information sources (Lefevre et al., 2002), especially in the era of technology whereby information spreads as it happens, as such, curbing or containing information spread to manage organizational crises remains a huge concern for the managers and organization's stakeholders (Bezes, 2018; Entman & Usher, 2018). Hence, containment and escaping such crises are out of the available strategies to be employed in managing most crises that arise in recent times (Beirman, 2020). Technology in recent times has contributed massively to global safety (Raspotnig, Karpati & Opdahl, 2018). Moreover, health, travel, aviation, sport, security, education, and even politics had benefited from the advancement in technology (Bulman & Fairlie, 2016; Hu et al., 2019). In the aviation industry, especially at the airport, technology has had both positive and negative effects on crisis management; for example, with technology, unethical behavior had been exposed (Al Shobaki et al., 2017; Amuna et al., 2017). In contrast, the improvement in the new technology had massively contributed to the untimely demise of airport commuters (Bernardi et al., 2017).

One of the most common and advanced technology in recent times is the unmanned Ariel vehicle known as a drone (Tatum & Liu, 2017). However, it has been commercialized, and the drone market is expected between the years 2015 – 2022 to reach between A \$5.95 billion – A\$7.47 billion (Ahmed & Dowland, 2019). The drone has been one of the breakthrough surveillance systems used in monitoring several activities at the airport (Basso et al., 2018). Moreover, the drone has been a useful apparatus for monitoring and keeping safe the airport and its surroundings and other secured facilities (Lykou et al., 2020). It is widely used due to its price affordability as compared to the use of satellite or the use of the helicopter and a cameraman (Green et al., 2019). Considering the usefulness of drones, especially by the government, there are indications that sooner or later, the good use of drones might be 'hijacked by the bad guys' (Fotouhi et al., 2019). According to the cybersecurity, the consultant warned that there is apparatus capable of bypassing drone security being currently sold in the market (Ahmed & Dowland, 2019).

Considering this, there are several cases of drone crises in the year 2019; for example, the Saudi oilfield was attacked by a terrorist using a drone (Dudenhoeffer, 2020). Also, in the year 2018, the Russian military base in Syria was attacked using a drone (Lavrov, 2018). However, the

attack on military and oilfield attacks, there is a history where the drone has caused crises in the airport (Samaan, 2020). As well as of the mayhem caused by drones, especially at the busiest airports, namely, the London Gatwick and Frankfurt airport where because of the drone, flights were cancelled, customers were stranded and causing disruption in the airport activities that saw the cancellation of over 800 flights and more than 120,00 individuals became stranded (BBC News, 2018).

Some commercial drones might seem harmless to bigger flights with no fatal injuries or damage (Hern & Topham, 2018). However, in the wake of threats from terrorist organizations, such sightings needed to be treated with maximum security measures. Examples of the potential hazards that drone can cause in the airport according to Sathyamoorthy (2015) includes deliberate intrusion into the airport radio frequency (RF) signals or emissions, illegal surveillance, and reconnaissance, electronic snooping, and mid-air collisions with crafts. Concerning this, Sathyamoorthy (2015) suggests some of the ways to counter the potential attack from drones.

These include using technology such as geofencing; these include awareness, communication, and safety measures to deploy during such crises (Bennett, 2019). The Gatwick incident, according to the report by Weaver (2018), was critical that the military had to be called in to examine the nature, type, and why a drone could be flown on an airport runway. The intrusion of the Gatwick airport is a clear warning for countries like Dubai that typically rely on the tourism industry for its survival (Henderson, 2006; Zaidan, 2017) thus, making the Dubai airport the busiest airport in the world (Albeshr & Ahmad, 2015). This is because the Dubai government debunk the argument that the country depends largely on proceeds from crude oil but firmly attests that the economy solely depends on the tourism sector.

The aim of the study is to examine the impact of the crisis management practices (crisis readiness, crisis awareness, crisis control, crisis response) on effective crisis management in Dubai international airport.

## **LITERATURE REVIEW**

### *A. Crisis Readiness*

Planning is one of the fundamental and potential measures that organizations are required to put in place in case unprecedented events occurred (Eckhard et al., 2019; Ahmed et al., 2021). Since crises happen unexpectedly, an earlier study by Waryjas (1999) notes that about 50% of firms surveyed had no predetermined plan for managing crises; nevertheless, the same study argues that approximately 97% of the firms surveyed are curtailed to respond positively if in case of the event arises as well as, the plan for crisis remedies had been concluded with mix pieces of evidence especially when humanitarian crises are involved (Festag, 2017; Wang & Pitsis, 2019). On account of Festag (2017) argue that the readiness for managing crises does fail because the previous crises from human behavior seldom share similar characteristics with unprecedented crises. Managing crises are so crucial for organizations' monetary and non-monetary values and regaining public confidence, especially, the aviation industries.

Although the crises are described as external unprecedented and unethical events that cause stress, danger, chaos, and calamity (Cornia, 2019) nevertheless, the aftermath of crises can either be positive or negative based on how well prepared an organization is (Finsterwalder &

Kuppelwieser, 2020). Moreover, pertaining to readiness to crisis management, there are indications from earlier studies that most of the approaches prepared to contain or manage crises when it eventually happens to have a low significant effect or are totally not effective (Festag, 2017). According to the study of Smits and Ezzat Ally (2003), although they acknowledged that at times the material readiness might not fit into low expected crises nevertheless, chances to manage crises will be low if there is little to non-behavioral readiness in crisis management (Brown, 2019). While Freitas (2016) argues that most of the staff prepared for crisis events are either injured fatally or died during the crisis.

The significant importance of human resource management, organizational structure, organization unlearning factor, and organizational strategies have a significant effect on crisis readiness (Alharbi, 2018). Some of the factors mentioned by Freitas (2016) include poor data collection method which is used in designing training and get the crisis staffs prepared, and the ineffective command chain structure in the organization during the crisis. At the same time, the study of Festag (2017) stressed the counterproductive readiness of crisis management protocols set in place to contribute to the occurring crises in several situations. Considering this, Festag (2017) argues that one of the major issues intensifying the crises is the inconsideration of human behavior while setting up protocols for managing crises. In summary, the reviewed literature present that several organizations are not aware of the significance of proactive readiness for managing crises (Ritchie & Jiang, 2019). While, the crisis readiness among the organization that feels they are fully prepared to manage effectively and efficiently the potential crises failed to achieve the intended result (Van der Meer & Jin, 2020).

The reason for this is because they rely on the chain of command that is ineffective during crises, manager's intelligence. According to Salfinger et al. (2016), it notes the importance of logistics readiness, that is, supplying the needed information accurate descriptions of where and how the incident happens as well as situation awareness in managing crises. Besides being aware of the situation, adequate preparations to effectively and manage crisis had been the major concern of crisis managers who engage in reacting to crisis events (Wang & Pitsis, 2019). The observed results from the plan to contain and manage the anticipated effect of the crisis readiness do fail to achieve its intended objectives; this is because of two major factors, namely, the materials' technological' and human factors (Etemad, 2020).

### *B. Crisis Awareness*

Acknowledging a situation or being aware of crises implies there is a chance of managing or containing the potential crises (Wang & Pitsis, 2019). According to the earlier studies, crisis awareness might not directly mean that the actor has the full knowledge of the potential crises but must be able to identify the subtle cues, evolving situations, and special knowledge elements (Holford, 2020). However, the initial step of containing or managing any crisis is to understand the full extent of the situation; it is mainly about being aware of what exactly happened and still happening (Kornberger, 2019). Given a scenario in an airport, the security officer, while patrolling, noticed that someone is doing something illegal, then the ability of the officer to access the important information and know the appropriate procedures can enhance their situational awareness so that they can respond effectively (Wolf, 2017).

One crucial point to consider is basically where the security breach is happening. Moreover, access to Geo-location data is very important for recognition of the circumstance, as it allows

to easily locate the area and respond effectively (Teixeira et al., 2020). In the airport example, the security officer can easily locate policemen or other Airport safety and security information in her location, then nearby police officers will be notified, and they will be provided with step-by-step details to the scene (Culp, 2016). Previous data can be useful in case of a situation. For instance, the Airport safety division might have a document of all unlawful activity that had happened recently in a specific location, and by using this, police can create a list of suspects to start the investigation (Perritt Jr & Sprague, 2016). Another fundamental aspect in helping officers is the ability to access real-time data (Jagtap et al., 2019). For example, camera files of the area of the crime, location devices for potential weapons, and facial recognition technologies (Li, 2019). Another technology that can be used is License Plate Recognition. Using (LDR) sensing units may aid officers promptly in locating and chase the suspect (Jones, 2013). By utilizing geofencing innovation, these officers may also notify surrounding districts in the case of the suspect crossing into their areas (Jain, 2017).

Meanwhile, the study of Wang & Pitsis (2019) suggests that one of the crucial ways in managing crises is raising awareness about it. In another study, Appelbaum et al. (2012) conclude the significance of being aware of the situation that might reduce the crises and have effective crisis management. While Wang & Pitsis (2019) conclude that most organizations failed to contain negative crises because they are not fully informed (aware) about the crises, nature, or magnitude of their impact. Being aware of the potential crisis, the crisis effectively, the contextual awareness plays a significant role pertaining to the information about the potential crises, situation dynamics, representation and utilization of the information available is highly significant in the crisis management awareness stage (König et al., 2020).

Not do the actors only need to be aware of potential crises to manage them, the study of Freitas (2016) echoed the significance of safety awareness during the crisis as a precautionary measure to contain the occurring crises. Moreover, to manage crises through awareness creation, scholars in recent times had highlighted the use of social media networks (Salfinger et al., 2016). However, this research scope is not extended to the communication of crisis events to the public. Thus, the literature on communication awareness is not examined in this study. Earlier studies argue a significant relationship between awareness and effective crisis management (Wang & Pitsis, 2019). Evidence from the earlier findings by Gaba Howard and Small (1995) concludes that being aware of situations is an important first step in managing them if it perhaps leads to crisis. In support of this, Wang and Pitsis (2019) conclude awareness to be a crucial step in managing crisis.

The effectively manage occurring crisis events; the actors need to be fully aware of what went wrong (Nohrstedt et al., 2018). While Freitas (2016) claimed to be aware of the crisis, it enables crisis managers to develop ways of effectively manage such. Furthermore, part of the awareness identified by earlier scholars is information gathering. According to Salfinger et al. (2016), gathering intel about the potential crises allows the crisis managers to evaluate how to tackle such potential crisis events. Similarly, Wang and Pitsis (2019) conclude that sharing information with those parties involves in crisis management is vital to contain and manage the potential crisis. Besides, information about the potential crises, situation dynamics, representation, and utilization of the information available is highly significant in the crisis management awareness stage (Abu Amuna et al., 2017).

### C. *Crisis Control*

When a crisis occurs, it is not necessary for everyone to access important information at the same time (Payne et al., 2018). Some people (depending on their position) will need to access all the necessary details and only at the appropriate time (Harder et al., 2017). Controlling communication during a crisis is very important (Jain, 2017; Sovacool et al., 2020). When a crisis happens, an effective interaction system should send out notifications to the nearest police stations and open communication with those who are tasked with replying to the crisis (Joyal & Seidman, 2019).

Civilians will not be part of this communication channel, but they should receive regular updates regarding the crisis, and they can also contact police if they have information or suspects someone (Ulmer et al., 2017). Sometimes, when there is so much information, it can be overwhelming and can divert the officer's attention away from what is important; therefore, alarms and relevant information should be actually sent based on sites, relevancy, and urgency (Jacobson, 2010). In other cases, if the information got to the wrong person, it can be a risk. As an example, policemen need to be able to access information from different areas. However, everyone should not have these details because if a criminal knew which areas are not secured or have less security, then they will attack those areas (Ulmer et al., 2017). Sometimes, crisis management, when information is available, can save lives, so the people who respond to the crisis need to have instant communication strategies like calls, messages, and online video, along with real-time visions (Bland, 2016).

The reality of action of planning and recognizing that the basis for building effective crisis control lies in the human ability to recognize and correct mistakes (Comfort, 2007). In the crisis control practice, it is essential for clear communication and coordination of actions among emergency response organizations (Kim et al., 2019). Moreover, the crisis control level of shared information among the different organizations and jurisdictions participating in disaster operations at different locations, so all actors readily understand the constraints on each and the possible combinations of collaboration and support among them under a given set of conditions (Tatham et al., 2017). However, crisis control is usually accomplished through common training, years of shared experience, and professional interaction among individual emergency response personnel (Reuter & Kaufhold, 2018).

Management of a crisis is a significant issue when the requirements of catastrophe operations include several organizations coming from private and non-profitable fields (Sewordor et al., 2019). Moreover, the importance of cognition is very crucial to recognize the collapse of the intergovernmental unexpected emergency administration system for crisis control procedures (Son et al., 2020). Crisis control can provide a very clear understanding of the severeness of this emerging danger (Finsterwalder & Kuppelwieser, 2020). The better the management and communication during preparation and responding to operations can boost management over the wide scale of activities that needs mitigation, responding, and recovering from the continuous destruction (Shittu et al., 2018).

The reliance on effective interaction on cognition and effective synchronization of communication emphasizes the straight design of crisis control operations (Luna & Pennock, 2018). Controlling a crisis in catastrophe procedures cannot easily be obtained through hierarchical procedures only (Imperiale & Vanclay, 2019). Instead, it creates via a procedure

of quick examination of danger, assimilation of info coming from multiple sources, the capability to create key strategies of activity, id, and adjustment of error, and a regular tracking and responses process (Stouten et al., 2018). This procedure cannot be performed properly on a broad range under the restraints imposed due to the present organizational layout and the national response program, and the national management system (Greenhill et al., 2020). As an alternative, including cognition to the process, recognizes the demand to consist of a step-by-step method of adjusting to vibrant, unsure health conditions as crisis control grows and dissipates (Liu, 2019).

#### *D. Crisis Response*

Eventually, the aspect of excellent communication is mainly to enable rapid and accurate feedback; moreover, awareness and management permit stakeholders to correspond effectively and shape an educated planned reaction along with speed and effectiveness (Kaziba, 2020). Security and policing, where efficient and prioritized communication between policemen and control centers, allows for making good and better decisions (Ali Mohamad Jibai, 2018). They are establishing pre-planned strategies, and a well-defined process can aid in making sure that policemen obtain the degree of coordination needed to efficiently respond to a crisis (Granåsen, 2019). The portion of that planning needs to entail the implementation of strong workstream cooperation methods (Scobie & Clarke, 2020). In addition, when providing policemen with the capacity to organize structured responses, issues may be minimized, and control can sustain much better management over the chosen method (Yanmaz et al., 2018; Gephart et al., 2018). Crisis response is generally considered an unpredictable event that can potentially generate negative outcomes and may threaten corporate reputation (Park, 2017). The organization needs to effectively communicate with the public about crisis response to protect themselves from reputational decline (Claeys & Coombs, 2020).

Nonetheless, the initial crisis responses consist of retelling the important information (what took place, exactly how the crisis might influence the general public, and what the general public needs to do) and modifying information (what are the step that the organization is taking to stop the crisis from happening again) (Richards et al., 2017). The Techniques used for recovering a reputation can be used to fix or prevent any reputational damage (Coombs et al., 2016). Although an initial response is needed for every crisis and can be incorporated with reputation repair methods, initial responses have been researched many times in previous literature (Ma, 2020). Lots of research studies have centered on reputation recovery more than the initial response or any other response (Tao & Song, 2020). It is necessary to know the impacts of various sorts of crisis response tactics such as no action, core feedback, reputation repair work, and both core response and reputation repair service on the general public's impressions of the organization (Vafeiadis et al., 2019).

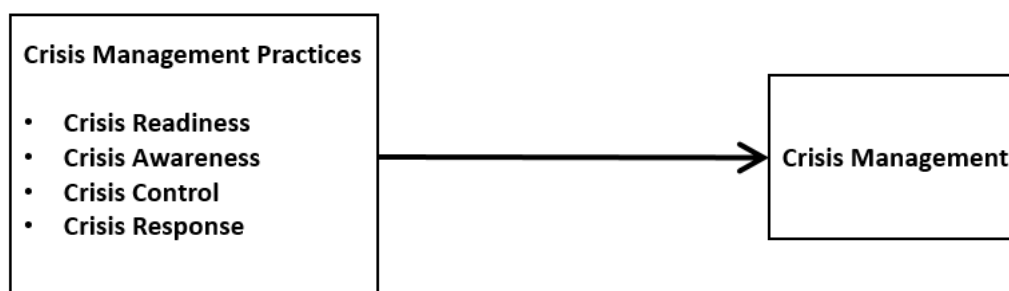
Regarding for the crisis response strategies, focuses on reminding strategies to determine the effectiveness of reminding consumers of an organization prior good works, because many organizations utilize strategies these days (Kriyantono & McKenna, 2019). Specifically, the crisis response could be communicated, especially when the crisis is related to a company's prior efforts, which is an important one to consider (Claeys & Coombs, 2020). Experiments are utilized to demonstrate a cause-effect relationship between the crisis response strategies and specific crisis outcomes, including organizational reputation, purchase intention, and negative word-of-mouth (Claeys & Coombs, 2020). In crisis response offer the strongest bodies

of evidence; each research line offers evidence-based assessments of the optimal and suboptimal strategies to use in particular crisis situations, making them normative theories (Coleman, 2020).

### E. Conceptual Framework

The research framework in Figure 1 illustrates the relationships between the exogenous variable (crisis management practices) and the endogenous variable crisis management. From earlier studies in different contexts and research approaches, that is, reaction to the crisis, the variables under investigation had been argued to have a significant relationship to crisis management. The proposed hypotheses are the following:

- Hypothesis 1: There is a significant positive influence from crisis readiness on crisis management of drone threats in Dubai international airport.
- Hypothesis 2: There is a significant positive influence from crisis awareness on crisis management of drone threats in Dubai international airport.
- Hypothesis 3: There is a significant positive influence from crisis control on crisis management of drone threats in Dubai international airport.
- Hypothesis 4: There is a significant positive influence from crisis response on crisis management of drone threats in Dubai international airport.



**Figure 1:** Conceptual Framework

## METHODOLOGY

The study is quantitative method research based on the original data collected for the target population in the Dubai international airport based on a well-structured survey. The study is an empirical investigation by surveying employees from specific management levels based on predefined hypotheses.

The target or study population chosen for this research is the total number of employees, both senior and junior staff working at the Dubai international airport. The reason for this is that if crises struck, all will be affected, and they have a big role to play in managing crises. The actual sample size is 364 employees, and the distributed survey is 440, which is distributed by using face-to-face data collection methods in a conventional technique of sample selection.

The tool used for data collection is a well-structured survey that is adapted from previous studies. The survey was organized to ask questions in Likert-5 format. Likert 5 questionnaire style has been used in social science studies for a long time and proved to be a suitable style for measuring human perceptions. Structural equation modeling (SEM) techniques are used for



statistical data analysis via the SmartPLS software package, which is used in management and social science studies such as (Salem & Alanadoly, 2020; Salem & Salem, 2018).

## FINDINGS

### F. Demographic Analysis

The distributed questionnaires were 440; the collected samples were 392, uncompleted cases were 15, initial cases for analysis were 377, unengaged screening was 8, univariate screening was 4, multivariate screening was 1, and the cleaned cases for analysis 364 cases.

Relating to the gender of participants, specifically, the males are representing a group of 61% and the females with a percentage of 39%, which is normal in such a society. Regarding the age of respondents, the major group is 26-35 years old (30.8%), followed by 36-45 years (29.9%). Regarding the qualification of respondents, respectively the respondent's high school are representing 10.7%, between Diploma are representing 22.8%, and between Bachelor are representing 51.4%, between postgraduate are representing 11.5%, and Others are representing 3.6%. Regarding the marital status of respondents, respectively, the respondents Single are, representing 34.9%, married are representing 54.7%, Divorced are representing 4.9%, and Widowed are representing 5.5%. Regarding the work experience of respondents, respectively, the respondents less than five years are representing 30.5%, 5 - 10 years are representing 27.7%, 11-15 years are representing 31.3%, and more than 15 years are representing 10.4%.

**Table 1:** Demographic Analysis

		Frequency	Percent
Gender	Male	222	61.0
	Female	142	39.0
	Total	364	100.0
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
	High School	39	10.7
	Diploma	83	22.8
	Bachelor	187	51.4

		Frequency	Percent
Qualification	Postgraduate	42	11.5
	Others	13	3.6
	Total	364	100.0
Marital status	Single	127	34.9
	Married	199	54.7
	Divorced	18	4.9
	Widowed	20	5.5
	Total	364	100.0
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

### G. Descriptive Statistics

As seen in table 2, crisis awareness (CA) shows a positive satisfying level with a mean value of 3.0170, which reflects a positive perception by respondents. Crisis communication (CC) shows a positive satisfying level with a mean value of 3.4421, which also reflects a positive perception by respondents. Crisis management (CM) shows a positive satisfying level with a mean value of 3.0267, which also reflects a positive perception by respondents. Crisis response (CRE) shows a positive satisfying level with a mean value of 3.2236, which also reflects a positive perception by respondents. Crisis readiness (CRS) shows a positive satisfying level with a mean value of 3.2132, which also reflects a positive perception by respondents. All five constructs of this study are showing a positive satisfied level of perception by respondents.

**Table 2:** Descriptive Statistics of Research Constructs

	Min	Max	Mean	Std. D
Crisis Awareness	1.12	4.73	3.0170	.94243
Crisis Communication	1.35	5.00	3.4421	1.02330
Crisis Management	1.46	4.90	3.0267	.78525

Crisis Response	1.35	4.86	3.2236	.89162
Crisis Readiness	1.54	5.00	3.2132	1.00095
Technology Use	1.51	5.00	3.4560	1.00129

#### H. *Validity and Reliability of Constructs*

Several measures have been conducted, such as composite reliability, outer loading, convergent validity, and discriminant validity, to ensure reliability and validity of the measurement model (Hair Jr, Hult, Ringle, & Sarstedt, 2016; Sekaran & Bougie, 2016). As shown in Table 3, composite reliability is measured by Cronbach's Alpha, and all values are above the cut-off value of 0.70. Therefore, the reliability of the measurement model is achieved. In addition, outer loading for all the items is above 0.708 with no cross-loading from foreign items. Therefore, indicator reliability is achieved. The average Variance Extracted (AVE) values are above 0.5. Therefore convergent validity is achieved. All other test shows an adequate level of validity and reliability.

Table 3: Constructs Reliability and Validity

construct	AVE	Cronbach's alpha
Crisis Awareness (CA)	0.581	0.896
Crisis Control (CC)	0.622	0.880
Crisis Management (CM)	0.665	0.899
Crisis Readiness (CRE)	0.596	0.864
Crisis Response (CRS)	0.637	0.905

#### I. *Relationships Examinations and Discussions*

For the purpose of assessing the power of the model construct in predicting the outcome variables, predictive power  $R^2$  and predictive relevance were used (Hair Jr et al., 2016). Results of the main dependent variable, crisis management (CM), illustrate a satisfactory predictive power and a large predictive relevance. As seen in the table, the related R square value is 0.631 (a power of 63.1%), and the related Q square is 0.354 (a relevance of 35.4%). The research study relationships are in one instruction, along with the ideal degree of evaluation is one-tailed. Figure 2 shows the T statistics estimates of the study made design as well as Table 4 shows the path coefficient assessment with the values of T Statistics and also Beta values for the end result variable crisis management (CM). All variables' antecedents have significant relation, in which the p-value scores are above 0.05, and the t statistics scores are above 1.65. The precedence for the relations based on the path coefficient value is CA (0.319), CC (0.107), CRE (0.368), and CRS (0.283).

#### **Table 4:** Predictive Power and Predictive Relevance of Proposed Model

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

**Table 5:** Path Coefficient 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

## CONCLUSIONS

Overall, the model is successful because it can predict 63% of crisis management, and the direct relationships for the four predictors of crisis management are significant. The precedence for the relations based on the path coefficient value is crisis awareness (0.319), crisis control (0.107), crisis readiness (0.368), and crisis response (0.283).

This study is limited to the empirical examination of UAE airports; however, replicating the same design with the same research design but in different countries will provide extra knowledge to generalize the proposed relations. In addition, the model can explain up to 63% of the crisis management variance; scholars are welcome to investigate more crisis management practices increasing the model power.

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