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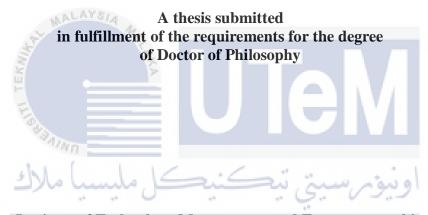


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**Doctor of Philosophy** 

# THE IMPACT OF STRATEGIC FORESIGHT ON DYNAMIC CAPABILITIES OF PUBLIC ORGANIZATIONS IN THE UAE

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### **DECLARATION**

I declare that this thesis entitled "The Impact of Strategic Foresight on Dynamic Capabilities of Public Organizations in the UAE" is the result of my own research except as cited in the references. The thesis has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.

# **APPROVAL**

I hereby declare that I have read this thesis and in my opinion this thesis is sufficient in terms of scope and quality for the award of Doctor of Philosophy.

Signature : ....

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Date : 20/03/2023

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# **DEDICATION**

I dedicate this research work to my family, supervisor, and friends.



#### **ABSTRACT**

Organizations nowadays, whether in the private or public sector, are being forced to adopt approaches that can enable them to deal with the dynamic external environment. However, with many recent shocks such as the COVID-19 pandemic, organizations worldwide, whether private or public, are realizing that their old ways of doing things were no longer sustainable. Especially in countries such as the United Arab Emirates (UAE) that are trying to rapidly modernize their society, they are acknowledging that simply relying on resources is no longer sufficient for them to deal with future challenges. Public institutions are being asked to develop new ways of thinking that can help them shape the nation's future. Hence, concepts such as strategic foresight and dynamic capabilities are being looked at as potential goals that need to be integrated into public organizations. In this regard, the Dynamic Capabilities View postulates that organizations can become successful in dealing with uncertainties of the external environment if they develop the ability to sense opportunities and threats, and seize upon these changes, and transform their systems, operational models, and processes to deal with such forces. The literature also indicates that strategic foresight plays an important role in dealing with the external environment. The current study proposes developing a conceptual model using the theory of dynamic capabilities to suggest that the five dimensions of strategic foresight, such as environmental scanning, scenario planning, knowledge creation, culture, and formal organization, impact the dynamic capabilities of public organizations in the UAE. Using a quantitative survey method, the study tested a set of hypotheses using data collected from senior officials working in such public organizations in the UAE. The data were tested using multivariate analysis by deploying structural equation modeling through Smart-PLS. The findings showed that the five strategic foresight dimensions, namely environmental scanning, scenario planning, knowledge creation, culture, and formal organization with p-values 0.001, 0.003, 0.000, 0.005, and 0.000, respectively, have a significant direct effect on the dynamic capabilities of public organizations in the UAE. Besides, the findings of the mediator "organization learning capacity" showed that it has a significant indirect mediating effect on the relationship between the five strategic foresight dimensions, with p-values 0.001, 0.000, 0.003, 0.000, and 0.000, respectively, and the dynamic capabilities of public organizations in the UAE. Based on these findings, this research provided an adaptable strategic foresight model that starts with identifying strategic foresight dimensions and tests these variables and their impact on the dynamic capabilities of public organizations. The current research concluded that the utilisation of strategic foresight has a potential role in improving public organisations and the country's national economic expansion. Therefore, policy makers and decisionmakers need to be innovative and focus on combining strategic foresight and dynamic capabilities by utilizing the significant factors that enhance the current status of organizations with future nature and work requirements.

# KESAN RAMALAN STRATEGIK TERHADAP KEUPAYAAN DINAMIK ORGANISASI AWAM DI UAE

#### **ABSTRAK**

Organisasi pada masa kini, sama ada dalam sektor swasta atau awam, terpaksa menggunakan pendekatan yang membolehkan mereka menangani persekitaran luaran yang dinamik. Walau bagaimanapun, dengan banyak kejutan baru-baru ini seperti pandemik COVID-19, organisasi di seluruh dunia, sama ada swasta atau awam, telah menyedari bahawa kaedah yang sedia ada untuk bertindak tidak lagi sesuai. Terutamanya di negara seperti Emiriah Arab Bersatu (UAE) yang cuba memodenkan masyarakat mereka dengan pantas, mengakui bahawa hanya bergantung kepada sumber maklumat sedia ada tidak lagi mencukupi untuk mereka menangani cabaran masa depan. Institusi awam diminta membangunkan cara pemikiran baharu yang boleh membantu mereka membentuk masa depan negara. Oleh itu, konsep seperti ramalan jauh berstrategik dan keupayaan dinamik dilihat sebagai matlamat berpotensi yang perlu disepadukan ke dalam organisasi awam. Dalam hal ini, keupayaan ramalan dinamik menyatakan bahawa organisasi boleh menjadi berjaya dalam menangani ketidakpastian persekitaran luaran, jika mereka membangunkan keupayaan untuk merasakan peluang dan ancaman, dan merebut perubahan ini, dan mengubah sistem, model operasi dan proses mereka untuk menangani kuasa sedemikian. Literatur juga menunjukkan bahawa ramalan jauh berstrategik memainkan peranan penting dalam cara organisasi menangani persekitaran luaran. Kajian semasa mencadangkan untuk membangunkan model konseptual menggunakan teori keupayaan dinamik dengan lima dimensi ramalan jauh strategik iaitu pengimbasan alam sekitar, perancangan senario, penciptaan pengetahuan, budaya, dan organisasi formal di mana telah memberi kesan kepada keupayaan dinamik organisasi awam dalam UAE. Menggunakan kaedah tinjauan kuantitatif, kajian itu menguji satu set hipotesis menggunakan data yang dikumpul daripada pegawai kanan yang bekerja di organisasi awam tersebut di UAE. Data telah diuji menggunakan analisis multivariate dengan menggunakan pemodelan persamaan struktur melalui Smart-PLS. Dapatan kajian menunjukkan bahawa lima dimensi ramalan jauh strategik, iaitu pengimbasan alam sekitar, perancangan senario, penciptaan pengetahuan, budaya, dan organisasi formal mempunyai kesan signifikan secara langsung ke atas keupayaan dinamik organisasi awam di UAE dengan masing-masing nilai-p 0.001, 0.003, 0.000, 0.005 dan 0.000. Selain itu, dapatan pengantara "kapasiti pembelajaran organisasi" menunjukkan bahawa ia mempunyai kesan pengantaraan tidak langsung yang ketara terhadap hubungan antara lima dimensi ramalan jauh strategik, dan keupayaan dinamik organisasi awam di UAE. dengan nilai-p masing-masing 0.001, 0.000, 0.003, 0.000 dan 0.000. Berdasarkan penemuan ini, penyelidikan ini menyediakan model ramalan jauh strategik yang boleh disesuaikan yang bermula dengan pengenalpastian dimensi ramalan jauh strategik dan menguji pembolehubah ini dan kesannya terhadap keupayaan dinamik organisasi awam. Penyelidikan semasa merumuskan bahawa penggunaan ramalan jauh strategik mempunyai potensi peranan dalam menambah baik organisasi awam serta pengembangan ekonomi negara. Oleh itu, pembuat dasar dan pembuat keputusan perlu inovatif dan menumpukan pada menggabungkan ramalan jauh strategik dan keupayaan dinamik melalui penggunaan faktor penting yang meningkatkan status semasa organisasi dengan sifat dan keperluan kerja masa hadapan.

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UNIVERSITI TEKNIKAL MALAYSIA MELAKA

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# LIST OF ABBREVIATIONS

DC - Dynamic capabilities

DCV - Dynamic capabilities view

OLC - Organizational Learning Capability

RBV - Resource-Based View

SF - Strategic Foresight

TDC - Theory of dynamic capabilities



### LIST OF PUBLICATIONS

- Ali Almansoori, B. S., Asmai, S. A., 2021. Gauging the Importance of Strategic Foresight Factors Affecting Public Organisational Dynamic Capabilities. *International Journal of Sustainable Construction Engineering and Technology*, 12(5), pp. 352-358.
- Ali Almansoori, B., S., Asmai, S.A., Kamalrudin, M., 2022. Mediation Model of Strategic Foresight Influencing Dynamic Capability. *International Journal of Sustainable Construction Engineering and Technology*, 13(2), pp. 120-133

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### **CHAPTER 1**

### INTRODUCTION

#### 1.1 Introduction

In today's dynamic environment, organizations, whether public or private, must have the capacity to adjust to the rapid changes around them through strategic foresight (SF) about the future (Rohrbeck 2012; Peter and Jarratt, 2015; Ramadan, 2017; Haarhaus and Liening, 2020). Public sector organizations are now expected to possess the ability to adjust their capabilities by envisioning the future in order to justify the existence of such organizations (Schwarz et al., 2020). Stakeholders in developed countries are demanding that their public institutions develop the dynamic capabilities (DC) required to face challenges that are associated with complexities and uncertainties created in a world where change is happening at an exponential rate (Murphy, 2021; Posen et al., 2023). Dynamic capabilities have been defined as the ability of an organization to sense opportunities and challenges, and then seize upon them, leading to the transformation within the organization necessary to carry out such changes (Teece, 2018).

Scholars argue that dynamic capabilities are an organization's "...ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments" (Teece et al., 1997), and such capabilities are key to managing uncertainty, thus shaping an organization's ability to shape its own future (Teece, 2016; Burt and Nair, 2020). The lack of dynamic capabilities of public organizations, even in developed countries has been exposed by the Covid-19 pandemic. The majority of the countries around the world were completely unprepared for an unforeseen event of this scale, thus exposing the

weaknesses of such public organizations (Ruan, 2020). Therefore, as part of its' national security, forward-thinking countries around the world, such as the United Arab Emirates (UAE) have decided to upgrade the capabilities of all their public organizations to respond to rapid changes in the environment (AlShehhi et al., 2023).

In order to develop such dynamic capabilities, strategic foresight has been identified as a potential driver of such organizational capabilities (Haarhaus and Liening, 2020). Indeed, the existence of a culture that incorporates foresight in decision-making ensures that public institutions are able to cope with the rapid changes brought about with time (Ramadan, 2017). The literature indicates that strategic foresight is understood in two ways. A cluster of researchers view it as a process, on the other hand, others see it as an organizational ability (Murphy, 2021).

Among the early definition of foresight was by Slaughter (1997), who defines it as "the ability to create and maintain a high-quality, coherent and functional forward view and to use the insights arriving in organizationally useful ways." This would mean that foresight requires organizations to explore trends in the future and shape policies and strategies accordingly. Therefore, strategic foresight would be a set of techniques and activities that enhance the ability of an organisation to scan the horizon and shape future-looking strategies (Sharan et al., 2023). The literature indicates that strategic foresight is a multi-dimensional construct with five factors: environmental scanning, scenario planning, knowledge creation, culture, and formal organization (Harrhaas and Liening, 2020; Schwarz et al., 2020).

The public sector in the UAE among other fast-developing nations is becoming inclined to have control of and shape their futures (Kuosa, 2016). There is a growing interest amongst key decision-makers in the public sector to incorporate the concept of strategic foresight in their decision-making in such organizations, in order to effectively cope with the uncertainties and complexities of the future. However, the quest has not been easy for

public institutions as they struggle to implement such radical shifts in their processes, which are much easier done in the private sector (AlShehhi et al., 2023). The UAE has been at the forefront of integrating measures to develop the dynamic capabilities of its public institutions. In the quest for such a goal, strategic foresight has been identified as one of the potential drivers of dynamic capabilities (Haarhaus and Liening, 2020). Nevertheless, in the absence of sufficient empirical evidence on how strategic foresight interacts with the dynamic capabilities of organizations, the UAE government has been cautious in its' approach (Lehner et al., 2016; AlShehhi et al., 2023).

Building dynamic capabilities of public institutions is key to the growth and sustainability of a country such as the UAE, which has been heavily dependent on oil revenues in the past. With the emergence of new innovations in alternative energy, and in the wake of the drop in oil revenues driven by the economic shock created by the COVID-19 pandemic, UAE has decided to strengthen the capacity of public institutions to chart out and deal with the challenges of the future. For this to happen, such organizations much build dynamic capabilities needed to sense opportunities and threats and seize upon them and transform them into actions. One possible way to do this would be by integrating strategic foresight into each public organization. However, such decisions must be based on evidence from substantial in-depth research. Therefore, this doctoral research work aims to investigate the impact of the five dimensions of strategic foresight on the dynamic capabilities of public sector organizations in the UAE. The next section presents the problem statement that highlights the gap in the body of knowledge that needs to be addressed in order to draw conclusions on whether the dimensions of strategic foresight have a significant influence on dynamic capabilities.

### 1.2 Background

The alliance of seven states known as the United Arab Emirates (UAE) was officially fermented in 1971, comprising seven states, namely: Abu Dhabi, Dubai, Sharjah, Ajman, Ras Al-Khaimah, Fujairah, and Umm Al-Quwain (Mathias, 2017). Although Abu Dhabi as the capital, controls all the central government organizations, the public institutions are spread out all over the UAE. These institutions are either fully under the federal authority in Abu Dhabi or are government controlled by ministries and state authorities, or semi-government with a certain degree of autonomy.

The leaders of UAE have mandated that the public sector will be held responsible for delivering to the people, both citizens and non-citizens all the basic services that they were established for. The scope of responsibilities of each public sector organization is growing on every front, and these institutions are trying to enhance their capacities to handle the added responsibilities. The major challenge for these organizations is the delivery of requisite services to the people in both the current and future context. Decisions have to be made and the decisions have to be sustainable to ensure the interests are protected not only in the present but also in the future (Ramadan, 2017). The effectiveness of decisions dictates how the public sector in the UAE will be able to realize its objectives in the future thus creating the need to establish the role of strategic foresight in securing alternatives and possibilities that would be appropriate for the present as well as the future.

Organizations in the contemporary context are facing the challenge of what to anticipate in the future and what can be done in order to ensure that the future does not throw them off their game. Private entities and the public sector both are faced with the challenge of coping with the challenges that the future brings due to the uncertainties and complexities that they can barely control. However, private organizations are known to have more flexibility in their management compared to public entities, especially in dealing with

uncertainties about what the future holds. As a result, public organizations in UAE are now required to develop dynamic capabilities in their management and decision-making processes, in order to deal will the future. Table 1.1 provides statistics on public organizations in UAE.

Table 1.1: Public organizations in UAE

Type of Organization	Quantity
Ministries	17 ministries
Federal Authorities: organizations that are centrally	
controlled by Abu Dhabi, with authority over all	9 organizations
organizations	
Semi-Government: Run by autonomous boards that	
comprise of members from the government and private	132 organizations
sector subject-area experts.	
44 / / ./	*
Government Controlled Universities	14 universities
Government Controlled Charitable Foundations	16 foundations

The effectiveness of public organizations in the UAE depends on their ability to the flexibility necessary to adapt to the changes in the environment. Such dynamic capabilities may be developed through the adoption of concepts such as strategic foresight. However, whether strategic foresight plays a significant role in driving dynamic capabilities needs to be based on data-driven evidence through sound empirical investigations.

### 1.3 Problem statement

Inculcating the dynamic capabilities of public organizations may become an important source of building institutional capacity to deal with future challenges (Chowdhury et al., 2019). The extant literature seems to reveal that, only a few empirical studies have been published on the relationship between strategic foresight and dynamic capabilities (Haarhaus and Liening, 2020). Even though there appears to be a plethora of studies on foresight and organizational capabilities, most of these studies are based on the case-study approach (Vecchiato, 2015; Rhisiart et al., 2015). Furthermore, the studies that do provide empirical evidence on the relationship between foresight and capabilities (Paliokaite and Pecesa, 2015), seem to have considered foresight as a unidimensional construct. However, Haarhaus and Liening (2020), suggest that strategic foresight is a multidimensional construct, with five dimensions for example environmental scanning, scenario planning, knowledge creation, culture, and formal organization. In this regard, there appears to be a dearth of studies on how the individual dimensions of strategic foresight influence the dynamic capabilities of public organizations but not as a multidimensional construct.

A thorough and systematic review of the literature also reveals that the majority of the studies related to the foresight of organizational capabilities have examined the association based on management and technological capabilities of organizations, using the resource-based view (RBV) (Murphy, 2021). However, the theory of dynamic capabilities was presented by Teece et al. (1997), where the authors addressed the limitation of RBV as an inflexible theoretical model. The authors argued that the dynamic capabilities view (DCV) moves the discussion forward, by suggesting that organizations will have dynamic capabilities if they can sense opportunities and challenges, then seize upon them, and transform their organizational systems and structures in order to address these changes. So, far there seems to be insufficient empirical research on how the five dimensions of strategic

foresight impact the dynamic capabilities of organizations, based on DCV. Therefore, there appears to be a need to develop a nuanced understanding of the relationship between strategic foresight and dynamic capabilities, based on the theory of dynamic capabilities.

According to Semke and Tiberius (2020), there are many studies that have to investigate SF and DC; however, the joint analysis of both concepts in a single study is still under-explored. Generally, some studies have highlighted elements of these two concepts, such as Rhisiart et al. (2015) who showed that a firm's engagement in scenario planning can support and strengthen elements of DCs. Also, Fergnani (2020) stated that SF can enhance the micro foundation of DC. Similarly, the study of Schwarz et al. (2020) showed that SF training is related to the micro foundation of the organization's dynamic capabilities. Even though the study of Semke and Tiberius (2020) investigated the two concepts of SF and DCs in one study, this study was qualitative, and it did not provide any empirical findings. Therefore, the systematic investigation of the relationship between SF and DCs is scarce in past literature. This supports the direction and aim of the current study to bridge this gap by investigating the relationship between SF and DCs employing a quantitative design to test hypotheses in order to provide empirical findings and a clear understanding of the relationship between these two concepts.

An important variable related to strategic foresight is organizational learning capability (OLC). In strategic foresight processes, a significant distinction has been made between individual and collective organizational learning. Bootz et al. (2019) differentiate between foresight attitude, which relates to the cognitive aspects of anticipation and individual learning, and foresight behavior, which involves groups of individuals in more immersive learning within the organization. Concerning foresight attitude, it has been proposed that the cognitive skills of anticipation are centered on individuals, while collective learning is linked to organization policies and its direction to enhance learning across the