LEADERSHIP BEHAVIOR IMPACT TOWARDS EMPLOYEES' INNOVATION PERFORMANCE THROUGH TECHNOLOGICAL AND CULTURAL DIVERSITY WITHIN UNITED ARAB EMIRATES UNIVERSITIES

TARIQ HUMAID MOHAMMED ALMASKARI

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

DOCTOR OF PHILOSOPHY

2025

Faculty of Technology Management and Technopreneurship

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TARIQ HUMAID ALMASKARI

A thesis submitted
in fulfilment of the requirements for the degree of
Doctor of Philosophy

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UNIVERSITI TEKNIKAL MALAYSIA MELAKA

Faculty of Technology Management and Technopreneurship

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2025

DECLARATION

I declare that this thesis entitled "Leadership Behavior Impact Towards Employees' Innovation Performance Through Technological and Cultural Diversity Within United Arab Emirates Universities" 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.

Signature : _____

Name : TARIQ HUMAID ALMASKARI

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UNIVERSITI TEKNIKAL MALAYSIA MELAKA

Date : 31st Jan 2025

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 :

.....

Supervisor Name : PROFESSOR TS. DR. EFFENDI BIN MOHAMAD

Date : 31st Jan 2025

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DEDICATION

I dedicate this thesis to my mother,

and

To my father.

You have successfully made me the person I am today

You will always be remembered.

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ABSTRACT

Leadership behaviors are critical in influencing employees' functioning and overall organizational performance, particularly within innovation. Effective leadership is essential for shaping a conducive work environment and promoting an organizational culture that supports innovation. In the context of universities in the United Arab Emirates (UAE), characterized by technological advancements and cultural diversity, understanding the impact of leadership on innovation becomes increasingly significant. The landscape of higher education in the UAE necessitates examining how different leadership behaviors, transformational, transactional, and laissez-faire, affect employees' innovative performance. Also, mediating factors, i.e., technological and cultural diversity, still need to be explored to improve this relationship. This research examines the direct and indirect relationships between leadership behaviors and employees' innovative performance in UAE universities, highlighting the mediating effects of technological and cultural diversity. Besides, it seeks to conduct a comparative analysis of leadership behaviors to understand their respective impacts on innovation comprehensively. The study gathered data from 633 employees working across universities in the UAE. A combination of descriptive and inferential statistics was employed, with Structural Equation Modelling (SEM) used to analyze direct and indirect relationships between variables. Bootstrapping techniques were applied to assess the mediating roles of technological and cultural diversity. The findings confirmed that transformational, transactional, and laissez-faire leadership behaviors positively impact employees' innovative performance. Employees' innovation was significantly associated with championing and implementing new ideas. Leadership behaviors demonstrated positive relationships with technological and cultural diversity, which further mediated the effects of innovation. The results highlighted the improved role of leadership behaviors in promoting innovation within culturally and technologically diverse environments. The study concludes that innovation-driven leadership significantly impacts employees' innovative contributions in UAE universities. Leaders' positions within organizations facilitate access to essential resources, enabling the successful execution of innovative ideas. Besides, cultural and technological diversity were found to amplify leadership's effectiveness in promoting innovation. These findings highlight the key role of leadership behaviors and diversity considerations in cultivating innovative performance in higher education institutions.

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IMPAK TINGKAH LAKU KEPIMPINAN TERHADAP PRESTASI INOVASI PEKERJA MELALUI KEPELBAGAIAN TEKNOLOGI DAN BUDAYA DALAM UNIVERSITI EMIRIAH ARAB BERSATU

ABSTRAK

Tingkah laku kepimpinan adalah penting dalam mempengaruhi fungsi pekerja dan prestasi keseluruhan organisasi, terutamanya dalam inovasi. Kepimpinan yang berkesan adalah penting untuk membentuk persekitaran kerja yang kondusif dan mempromosikan budaya organisasi yang menyokong inovasi. Dalam konteks universiti di Emiriah Arab Bersatu (UAE), yang dicirikan oleh kemajuan teknologi dan kepelbagaian budaya, memahami kesan kepimpinan terhadap inovasi menjadi semakin ketara. Landskap pendidikan tinggi di UAE memerlukan mengkaji bagaimana tingkah laku kepimpinan yang berbeza, transformasi, transaksi dan laissez-faire, mempengaruhi prestasi inovatif pekerja. Selain itu, faktor pengantara, iaitu, kepelbagaian teknologi dan budaya, masih perlu diterokai untuk memperbaiki hubungan ini. Penyelidikan ini mengkaji hubungan langsung dan tidak langsung antara gelagat kepimpinan dan prestasi inovatif pekerja di universiti UAE, menonjolkan kesan pengantaraan kepelbagaian teknologi dan budaya. Selain itu, ia bertujuan untuk menjalankan analisis perbandingan tingkah laku kepimpinan untuk memahami kesan masing-masing terhadap inovasi secara menyeluruh. Kajian itu mengumpul data daripada 633 pekerja yang bekerja di seluruh universiti di UAE. Gabungan statistik deskriptif dan inferensi telah digunakan, dengan Structural Equation Modelling (SEM) digunakan untuk menganalisis hubungan langsung dan tidak langsung antara pembolehubah. Teknik bootstrap digunakan untuk menilai peranan pengantara kepelbagaian teknologi dan budaya. Penemuan mengesahkan bahawa tingkah laku kepimpinan transformasi, transaksi dan laissez-faire memberi kesan positif kepada prestasi inovatif pekerja. Inovasi pekerja dikaitkan secara signifikan dengan memperjuangkan dan melaksanakan idea baharu. Tingkah laku kepimpinan menunjukkan hubungan positif dengan kepelbagaian teknologi dan budaya, yang seterusnya menjadi pengantara kesan inovasi. Hasilnya menyerlahkan peranan tingkah laku kepimpinan yang lebih baik dalam mempromosikan inovasi dalam persekitaran yang pelbagai budaya dan teknologi. Kajian itu menyimpulkan bahawa kepimpinan yang dipacu inovasi memberi kesan ketara kepada sumbangan inovatif pekerja di universiti UAE. Kedudukan pemimpin dalam organisasi memudahkan akses kepada sumber penting, membolehkan pelaksanaan idea inovatif berjaya. Selain itu, kepelbagaian budaya dan teknologi didapati memperkukuh keberkesanan kepimpinan dalam mempromosikan inovasi. Penemuan ini menyerlahkan peranan utama tingkah laku kepimpinan dan pertimbangan kepelbagaian dalam memupuk prestasi inovatif di institusi pengajian tinggi.

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ACKNOWLEDGEMENTS

First, I express my gratitude to Allah Almighty for granting me the health, patience, and resilience needed to complete this thesis. This endeavour marks the most challenging period of my life. Throughout this journey, your constant presence has been my solace.

The successful culmination of my PhD journey, encompassing both triumphs and tribula-tions, owes much to the unwavering support of Professor Ts Dr Effendi Mohamad. His ex-emplary supervision and academic guidance have left me deeply indebted. Professor Mo-hamad's profound knowledge, invaluable experiences, insightful feedback, and construc-tive critiques were instrumental in navigating the challenges of my PhD.

I extend heartfelt thanks to Dr. Siti Norbaya Yahaya, whose continuous support and vast knowledge played a crucial role in shaping my research. Working with you over the past two years has been a genuine pleasure.

I owe immense gratitude to my family, who allowed me to pursue this path and endure the pain of separation. My heartfelt thanks go to the mother of my children, who went the extra mile on my behalf. To my parents, the seeds you planted with nurturing hands have now flourished into fruition. May you both live long to savour the fruits of your efforts.

Appreciation is also extended to my friends and fellow PhD candidates at the university, who made this journey joyful and pleasant. The beautiful moments we shared will forever reside in my heart. Special thanks are reserved for the faculty members and administration staff for their unwavering guidance and support throughout my study, always ready to as-sist with academic and personal matters.

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LIST OF SYMBOLS AND ABBREVIATIONS

AMOS	-	Analysis of Moment Structure
AGFI	-	Adjusted Goodness-of-Fit
AVE	-	Average Variance Extracted
CES	-	Consumption Emotions Set
CFA	-	Confirmatory Factor Analysis
CFI	-	Comparative Fit Index
CR	-	Composite Reliability
CR	-	Critical Ratio
DES	-	Differential Emotion Scale
DF	-	Degree of Freedom
EFA	-	Exploratory Factor Analysis
ML	-	Maximum Likelihood
NFI	-	Normed Fit Index
GFI	-	Goodness-of-Fit Index
RMSEA	-	Root Mean Square Error of Approximation
SEM	-	Structural Equation Modelling
SE	-	Standard Error
SD	-	Standard Deviation
SPSS	-	Statistical Package for Social Science
TLI	-	Tuker-Lewis Index
PAD	-	Pleasure-Arousal-Dominance

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LIST OF PUBLICATION

1. **Almaskari, T.H.,** Mohamad, E., Yahaya, S.N. And Jalil, M.F., 2021. The influence of transformational leadership on employees' innovation in Universities of UAE: Mediating effect of Technological Diversity. *Journal of Asian Finance, Economics and Business*, 8(7), pp.657-669.

2. **Almaskari, T.H.,** Mohamad, E., Yahaya, S.N. And Jalil, M.F., 2021. Leadership as a Driver of Employees' Innovation Performance: The Mediating Effect of Cultural Diversity in UAE Universities. *The Journal of Asian Finance, Economics and Business*, 8(8), pp.271-285.

3. **Almaskar, T.H.M.,** Mohamad, E., Shafee, N.A.Q.M. and Yahaya, S.N., 2024. The Role of financial governance on institutional performance: A review study. *Multidisciplinary Reviews*, 8(8), p. 2025238.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter discusses the background and problem statement and also presents the research objectives and questions, along with the contributions, significance, and scope of the study. Also, the organisation of basic constructs is discussed to clarify their applicability in this research study further. The chapter defines the research background to classify the problems which lead to research objectives and questions and to deliberate on the methodological input of this study, as well as its scope. This chapter further discusses the theoretical, theoretical, and methodological significance of this research and the structure of this dissertation.

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1.2 Background

The educational sector has increasingly embraced innovative approaches today in the rapidly evolving organizational arenas to drive growth and sustainability (Gokce et. al., 2014; Masood et. al., 2017). Employee innovation, the process of assimilating and applying new or existing knowledge to develop advanced procedures and insights, plays a key role in organizational success (Johnso and Szamosi, 2018). Innovation is an asset and a foundational strength, enabling organizations to generate novel knowledge and implement

creative ideas to achieve competitive market value (Chen et. al., 2020). In this context, UAE universities are at the forefront of fostering innovation, adopting strategic efforts to align their institutional goals with global advancements in science and technology. This alignment highlights employee innovation as a crucial factor in institutional success and development (Cinnioğlu, 2020).

The Ministry of Education in the UAE has prioritized directives to digitize systems and integrate advanced technologies, recognizing their significance in enhancing institutions' operational and educational capacities. These initiatives aim to promote an innovative culture that enriches independent and flexible learning methods while promoting the effective dissemination of diverse content through advanced interaction channels (Masood et. al., 2017). The research highlights that cultivating an innovative university culture transforms traditional practices and equips employees with the tools and skills necessary to navigate and contribute effectively to the knowledge economy (Belias and Koustelios, 2018; Chen et. al., 2020). Such a culture allows institutions to address challenges like talent competition and leveraging technology to remain globally competitive.

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Organizations globally have increasingly acknowledged the strategic significance of innovation capabilities to expand performance and revenue (Politte-Corn et. al., 2022). The UAE's universities have proactively adopted diverse strategies to preserve a competitive edge, focusing on management practices, standardized routines, and resource optimization (Adamovic, 2023). However, traditional competitive strategies are becoming obsolete due to rapid technological advancements and economic globalization, necessitating a shift towards innovative methods (Sudiarditha et. al., 2019). Innovation in this context involves manipulating fresh and existing knowledge to achieve advanced

processes, facilities, and systems that enhance institutional effectiveness (Sarros et. al., 2018). This adaptability aligns with the UAE's broader national vision of becoming a knowledge-based economy, where promoting employee innovation is pivotal.

The UAE's educational institutions have also adopted innovation to address technological and social transformations within universities. The Ministry's digitization initiatives align with the need to modernize systems, improve technological infrastructure, and enhance employee competencies to meet evolving demands. UAE-based universities aim to optimize their institutional frameworks, ensuring sustainability and global competitiveness by embedding innovation into their culture. These efforts resonate with the findings of studies emphasizing the relationship between innovative behavior and organizational success (Belias and Koustelios, 2018; Chen et. al., 2020). Thus, innovation is a strategic initiative and a core component of the UAE's vision to promote a transformative educational sector that adapts to the dynamic global environment.

1.3 Problem Statement

The problem addressed in this study centers on the crucial role of leadership behavior in promoting employee innovation within universities in the UAE, especially within the context of a rapidly evolving global knowledge economy. Although UAE universities rank highly in international recognition for research and technical excellence (Scicommx, 2023), meeting the needs of a progressive knowledge-based economy necessitates a deeper understanding of how leadership influences innovation. Innovation in educational institutions is a complex process that extends beyond the ideation phase to include the challenging task of implementing novel ideas, making the role of leaders climactic. Leaders influence the generation of innovative ideas and their execution as they

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shape organizational culture and allocate resources to enable such initiatives (Joiner et. al., 2018; Kim et. al., 2021). Previous studies have highlighted the strategic importance of innovation for organizational success (Zehir et. al., 2011; Zhang and Yang, 2020), underscoring the need for leadership behaviors that promote creativity and innovation in educational settings (Banks et. al., 2021; Fries et. al., 2021).

One of the key challenges can be seen in ensuring access to resources, as leaders, through their positions, exert significant authority over resource distribution. This is a fundamental factor for successful innovation, providing employees with the tools, support, and materials necessary to transform ideas into practical outcomes (Hanaysha et. al., 2021). Furthermore, while UAE universities have made notable strides in achieving international recognition, a gap remains between the country's investment in innovation inputs and its actual outputs. Despite its wealth of resources and strategic investments (Kelemen et. al., 2020), the UAE ranks 126th globally in innovation outputs, reflecting an urgent need to address this disparity (Ali and Islam, 2020). As Yaghi (2017) highlights, the country holds approximately 20% of global petroleum resources. It plays a central role in OPEC, yet a continued dependence on the petroleum sector emphasizes the necessity of diversifying economic outputs and driving innovation in other sectors (Almansoori and Ahmad, 2023).

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Further, the UAE's unique position as a global hub characterized by extensive cultural and technological diversity introduces opportunities and challenges in promoting innovation. Its workforce is highly diverse, drawing on a blend of cultural and technological backgrounds that can drive creativity and innovation if effectively managed (Mehmood et. al., 2020). However, managing this diversity requires leaders to adopt behaviors that embrace differences and leverage them for innovative outcomes. The Ministry of Education's directives to digitize systems and integrate advanced technologies

into the higher education sector further underscore the urgency of developing leadership behaviors that align with national innovation strategies. These directives provide a unique opportunity to evaluate how leadership behaviors intersect with technological and cultural diversity to promote a more innovative environment. Notably, higher education institutions in the UAE rank higher among international institutions worldwide. These universities are considered professional and technically excellent. Figure 1.1 illustrates the ranking of the UAE-baed universities.

Top 5 UAE Universities in Internationl Media Recogmition for Research 2023

Based the total count of mentions in internationally recognized media

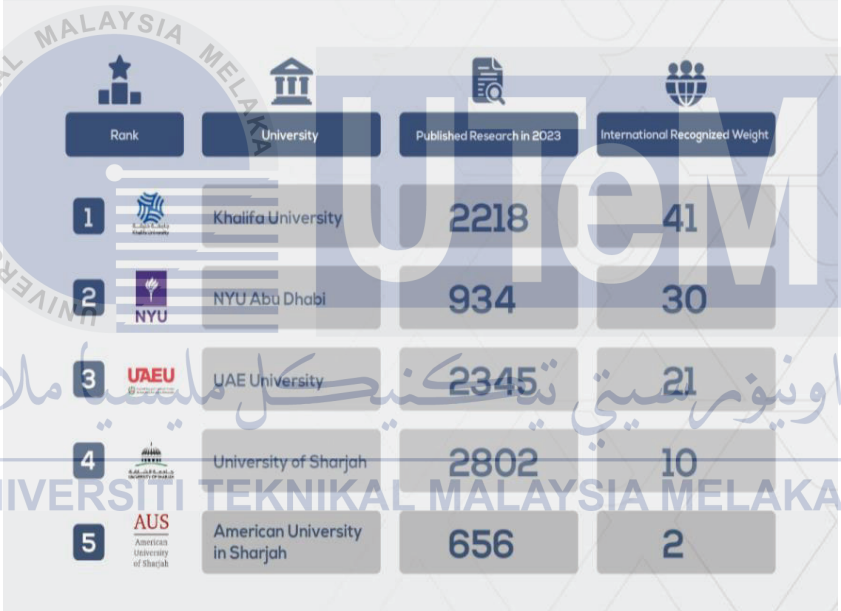

Figure 1.1: Ranking of UAE-based Higher Education Institutions (Scicommx, 2023)

Thus, this study addresses these interconnected challenges by examining the impact of transformational, transactional, and laissez-faire leadership behaviors on employees' innovation in UAE universities. It investigates the mediating roles of cultural and technological diversity in influencing this relationship, offering an in-depth understanding

of how leadership can amplify innovation in complex, diverse settings. This research aims to bridge the gap between theoretical insights and practical applications, contributing to the broader discourse on leadership, innovation, and diversity in organizational contexts. This study can inform strategies for enhancing innovation in the UAE's higher education sector. It offers practical insights for global efforts to strengthen the interplay between leadership and innovation in similarly diligent and diverse environments.

1.4 Research Question

The preliminary research question of this study is: What are the leadership behaviors and their impact on enhancing innovation in universities?

RQ1: What is the relationship between transformational, transactional, and laissez-faire leadership behaviors and employees' innovation in universities in the UAE?

RQ2: Does technological diversity mediate the influence of leadership behaviours on employees' innovation in universities in the UAE?

RQ3: Does cultural diversity mediate the influence of leadership behaviours on employees' innovation in universities in the UAE?

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1.5 Research Objective

The main objective of this study is to determine the leadership in the universities of UAE and its impact on innovation performance of employees. However, there are few specific objectives can be listed as follows:

1. To examine the relationships between transformational, transactional, and laissez-faire leadership behaviours and employees' innovation in universities in the UAE.
2. To assess the mediating role of technological diversity mediates on the relationship