

**MANAGEMENT AGILITY, COMPLEXITY ADAPTABILITY AND BUSINESS
RESILIENCE AMONG HOTELS IN KAMPALA METROPOLITAN**

BY

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DECLARATION

I, **Nsiimaruhanaga Joab** hereby declare that this research report is my original work and it has never been submitted to this or any other institution of higher learning for any award. Any material used and is not my original work, the Author has been acknowledged.

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APPROVAL

This is to certify that this research report titled “*Management agility, Complexity adaptability and Business resilience among hotels in Kampala Metropolitan*” has been done under our supervision and we approve it for submission to Directorate of Research and Graduate Training for examination.

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DEDICATION

I would like to dedicate this work to my Mother, my wife and my son.

ACKNOWLEDGEMENT

I want to sincerely thank God Almighty for all that I have accomplished in my studies. I am deeply grateful to my mother, wife, and son for their unwavering support in helping me complete my Master's degree at Kyambogo University and to come up with this paper. Specifically, I would like to thank my supervisors, Dr. Samuel Eyamu and Dr. Mayanja Ssekajja, for their intelligent and attentive mentoring during this study period.

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LIST OF ABBREVIATIONS

AfDB	African Development Bank
CAC	Complexity Adaptation Capability
CAI	Complexity Adaptability Index
CVI	Content Validity Index
DCT	Dynamic Capabilities Theory
SMEs	Small and Medium Enterprises
SPSS	Statistical Package for Social Scientists

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ABSTRACT

This study focused on management agility, complexity adaptability, and business resilience among hotels in Kampala Metropolitan. The study was anchored on four objectives, which included: to examine the relationship between management agility and business resilience; the relationship between management agility and complexity adaptability; the relationship between complexity adaptability and business resilience; and to assess the mediating role of complexity adaptability on the relationship between management agility and business resilience. The study utilised a cross-sectional survey research design and a quantitative research approach. A sample size of 127 hotels was considered for the study, as determined by Krejcie and Morgan (1970). 109 hotels successfully participated in the study, showing a response rate of 85.8 percent. Two respondents from each sampled hotel were selected using the purposive sampling technique, while a simple random technique was used when selecting the hotels to consider in the study. Data was collected using a closed-ended questionnaire, and it was analysed using SPSS Ver.23. The study findings revealed that management agility had a significant and positive relationship with business resilience ($r = .656^{**}$, $p < 0.01$). Complexity adaptability was also significantly and positively related to business resilience ($r = .665^{**}$, $p < 0.01$). Regression results revealed that management agility and complexity adaptability were positively and significantly related ($r = .737^{**}$, $p < 0.01$). Linear regression results revealed that management agility influences business resilience ($B = .679$, $p = .000 < 0.05$), complexity adaptability positively predicted business resilience ($B = .703$, $p = .000 < 0.05$), and management agility predicted complexity adaptability ($B = .781$, $p = .000 < 0.05$). Multiple regression analysis revealed that demographic characteristics positively predicted business resilience with 29.2 percent, while a combination of demographic characteristics, management agility, and complexity adaptability positively and significantly predicted business resilience with 64.0 percent and complexity adaptability was the main predictor of business resilience in hotels in Kampala Metropolitan. The study recommends that the Ministry of Tourism, Wildlife, and Antiquities should collaborate with stakeholders in the hospitality industry to develop training programmes aimed at enhancing the skills and capabilities of hotel staff in areas such as market trend analysis, risk management, team empowerment, and continuous learning. The Ministry of Finance should offer incentives, like tax holidays, to hotels that invest in research and development initiatives. Lastly, hotel management needs to invest in continuous learning and development programmes to empower their teams with the knowledge and skills needed to navigate complex environments effectively.

CHAPTER ONE

1.1 Introduction

To ensure long-term survival and success, businesses must increase their chances of adapting to disruptions, recovering swiftly, and maintaining a competitive advantage, which are key factors in business resilience (Rahman, Islam, & Hassink, 2019). Business resilience is the capacity of an organisation to foresee, plan for, react to, and adjust to both gradual changes and unexpected shocks in order to endure and thrive (Deloitte, 2018). It involves the ability to anticipate, prepare for, and adapt to change, as well as the capacity to efficiently react to unforeseen circumstances like cyberattacks and natural disasters, pandemics, and other disruptions that can affect operations. Relatedly, PwC (2021) revealed that business resilience is becoming more and more crucial as businesses face an ever-growing range of risks, including cyber threats, natural disasters, supply chain disruptions, and pandemics, and 69% of organisations consider resilience to be a high or very high priority for their business. However, the specific strategies that companies can use to build supply chain resilience are not well understood. Tao et al. (2019) suggest that building redundancy to adapt to complex situations can enhance resilience, while Xie et al. (2021) suggest that a focus on agility in management may be more effective. Therefore, this study was needed to clearly bring out how the strategies of management agility and complexity adaptability are related to the resilience of hotels in business. This chapter presents the background to this study, the statement of problem, objectives, research question, hypotheses, scope of study, conceptual framework, significance and justification, and operational definition of key concepts.

1.2 Background to the Study

1.2.1 Historical Background

Business resilience has been a concept that has evolved over time as a response to various events and crises that have occurred throughout history. The roots of business resilience can be identified in the early 1800s, during the period of 1819–1822, commonly referred to as the depression. During this time, businesses struggled to remain operational due to the bursting of a speculative land bubble and the contraction of credit (Bierman & Smidt, 2012). Subsequently, another significant depression occurred from 1873 to 1896, known as the Long Depression, which originated in the United States but had far-reaching global consequences. This crisis led to the collapse of more than half of the businesses worldwide. It was sparked by the failure of a prominent investment bank and resulted in a prolonged period of economic contraction (James, 1993).

In the 1940s, during the Second World War, many businesses were impacted by the war, and this led to the development of strategies to cope with disruptions such as the creation of backup suppliers, alternate manufacturing locations, and the use of different modes of transportation (Gallagher, 2003; Pitt & Goyal, 2004). For over two decades, business resilience has become increasingly important in recent years due to a variety of factors, including natural disasters, cyber-attacks, and economic instability.

The Global Financial Crisis (GFC) and credit crunch of 2007–2008 had a profound impact on business resilience. The crisis exposed vulnerabilities in the business landscape and tested the ability of organisations to withstand and recover from severe economic shocks. The roots of the economic crunch can be traced back to the housing bubble in the United States. In the early 2000s, there was a rapid expansion of the housing market, fuelled by loose lending practices and the securitization of mortgages (Reinhart & Rogoff, 2009). The effects of the economic

crunch were widespread and severe. Financial institutions faced insolvency, requiring government interventions such as bailouts and emergency liquidity measures. Stock markets around the world experienced significant declines, eroding trillions of dollars in shareholder wealth. Unemployment rates surged as businesses struggled, leading to layoffs and reduced consumer spending. Many households experienced financial distress, with declining home values and increased mortgage defaults (Blanchard & Quah, 2010).

In 2011, the earthquake and tsunami in Japan resulted in significant disruptions to businesses across the country, and the COVID-19 pandemic had a major impact on businesses around Asia (Rokosz & Karwowski, 2015; PWC, 2020). Following such incidences, many companies tried to quickly adapt their operations and supply chains to minimize the impact of the disaster and were able to pivot their operations to focus on online sales and delivery (Rokosz & Karwowski, 2015; PWC, 2020).

In Africa, business resilience has been a critical issue for businesses for a long time for a long time due to various challenges faced by the continent, including political instability, weak infrastructure, economic volatility, and social unrest. (African Development Bank, 2019). To address this challenge, businesses focused on resilience to manage risks and become adaptive to all challenges they go through (Agbibo & Agbibo, 2018). On top of political instabilities, disease outbreaks have for long threatened the resilience of businesses in Africa. The Spanish Flu pandemic in 1918–1919 caused widespread illness and death, leading to a decline in business activities due to labour shortages, reduced consumer spending, and disrupted supply chains. The HIV/AIDS epidemic since the 1980s has claimed millions of lives, resulting in challenges for businesses such as reduced productivity, increased healthcare costs, and the loss of skilled employees. The Ebola outbreak in West Africa from 2014 to 2016 caused severe economic consequences, with business activities disrupted by travel restrictions, fear of

contagion, and quarantine measures. The COVID-19 pandemic from 2019 onwards has had a profound impact on Africa's business resilience, with supply chain disruptions, reduced consumer demand, and business closures particularly affecting sectors like tourism, hospitality, and retail, resulting in significant job losses and economic contraction. Some businesses were able to adapt to the changing environment and continue operating. These businesses implemented measures such as remote working, increased hygiene protocols, and diversification of their product offerings (World Bank, 2021).

In Uganda, businesses face a range of challenges that threaten their resilience, including limited access to finance, inadequate infrastructure, and regulatory constraints (World Bank, 2020). To address these challenges and improve business resilience of businesses in Uganda, several initiatives have been undertaken, such as the establishment of business incubators, training programmes on management and risk management, and policies to support SMEs (Business Incubation Centre, 2022). However, Uganda has continued to have a high business failure rate, with about 61% of new businesses failing within the first three years of operation (World Bank, 2022). This forms a strong basis for studying the relationship between management agility, complexity adaptability, and business resilience in hotels that operate in Kampala Metropolitan.

1.2.2 Theoretical background

The study was anchored on the Dynamic Capabilities Theory (DCT) that was first proposed by Teece, Pisano, and Shuen in their 1997 paper "Dynamic Capabilities and Strategic Management" and has since become a widely influential perspective in management and strategy research. For a business to maintain a competitive advantage, it is necessary to create and deploy dynamic capabilities. Dynamic capabilities relate to the versatility of an

organisation to sense and respond to changes in its environment, reconfigure its resources and capabilities, and ultimately shape its competitive position (Helfat & Peteraf, 2015).

The dynamic capabilities involve three processes: sensing opportunities and threats, seizing opportunities, and reconfiguring the organisation's resources and capabilities. These processes help organisations adjust and align their resources and capabilities to achieve their strategic goals (Helfat & Peteraf, 2015). Businesses need to understand opportunities and threats in order to remain competitive and adaptable in a changing work environment. To do this, they must develop dynamic capabilities, which involve sensing opportunities and threats, reconfiguring strategies and structures, and ultimately enhancing business resilience (Kurtz & Varvakis, 2016).

This theory is essential to the study because it offers a pertinent framework for hotel management to advance management agility and adaptability to complexity and resistance in the face of uncertainty by improving their ability to thrive in a dynamic and competitive environment.

In a dynamic and competitive industry like hospitality, where changes in consumer preferences, market trends, and environmental factors constantly reshape the landscape, the ability to sense, seize, and reconfigure resources and capabilities becomes crucial. By employing dynamic capabilities, hotels can effectively adjust their strategies and structures to align with emerging opportunities and threats, thereby enhancing their resilience in the face of uncertainty. This study acknowledges the necessity for hotels to cultivate dynamic capabilities to navigate complexities, adapt swiftly to changes, and ultimately sustain a competitive advantage in the ever-evolving business environment, thereby leading to increased financial stability, self-situation awareness, leveraging knowledge, and proactive posture in the hotels.

1.2.3 Conceptual background

The study was guided by three variables, which are management agility, complexity adaptability, and business resilience in hotels.

Management agility is the ability of an organisation to react swiftly and efficiently to changes in both its internal and external operations. (McKinsey et al., 2018). It is the capacity to adapt to changing conditions, innovate, and pivot quickly while still maintaining organisational stability and continuity. In recent years, management agility has become increasingly important due to the rapid pace of technological advancement, market competition, and shifting customer preferences (Berman et al. 2018). What was not known was the combination of factors needed for the management to be agile. What needed to be known was how the ability to make quick decisions, adapt to changing circumstances, and communicate effectively with stakeholders contributes to the agility of management. However, in this study, management agility was looked at in terms of flexibility, rapid decision-making, and strategic thinking.

Complexity adaptability refers to an organisation's ability to navigate complex and uncertain situations (Kiel & Elliott, 2018). It involves being able to understand and manage complex systems, processes, and relationships, as well as being able to adapt quickly to changing circumstances (Yoon and Song, 2018). What was not known were the complex systems that enable organisations to adapt their behaviour according to changes in their environment or in parts of the system itself. In this way, there is a need to know how the system can improve its performance through continued interaction with its environment and how organisations with high complexity adaptability are able to maintain their effectiveness and efficiency despite increasing levels of complexity. However, in this study, complexity adaptability was looked at in terms of versatility, diversity, and innovativeness.

On the other hand, an organisation's capacity to predict, prepare for, adjust to, and accommodate gradual changes and unanticipated setbacks in order to survive and flourish is referred to as business resilience. (Deloitte, 2018). It involves the ability to anticipate, prepare for, and adapt to change, as well as the ability to respond effectively to unexpected events such as natural disasters, cyberattacks, pandemics, and other disruptions that can affect operations. Relatedly, PwC (2021) revealed that business resilience is becoming increasingly important as businesses face an ever-growing range of risks, including cyber threats, natural disasters, supply chain disruptions, and pandemics. However, what was not known and needed to be made clear was how organisations of different sizes and sectors consider the resilience of their businesses. In this study, business resilience was studied following the constructs of financial stability, self-situation awareness, leveraging knowledge, and proactive posture.

1.2.4 Contextual background

The study focused on the hotel sector in Uganda. The hotel industry in Uganda has been growing steadily in recent years. Tourism is a major contributor to the country's economy, and as more and more tourists visit Uganda, the demand for quality accommodation has increased (Uganda Hotel Owners Association, 2018). There are a variety of hotels in Uganda, ranging from budget-friendly lodges to luxury resorts. Many of the hotels are located in Kampala, the capital city, but there are also hotels in areas surrounding Kampala and other popular tourist destinations such as Jinja, Entebbe, and Bwindi National Park. In January 2020, the African Development Bank (AfDB) approved a loan of \$229.5 million to Uganda to support the country's tourism and hospitality sectors. The loan was aimed at supporting the hotels financially so they could remain operating through improving infrastructure, promoting private sector investment, and enhancing the quality of tourism offerings in the country, including hotels and resorts. (African Development Bank, 2020).

For the past three years, Uganda's hospitality sector has been hardest hit. Due to COVID-19's reduced demand and travel restrictions, hotels that offer inexpensive lodging for travellers have been especially vulnerable (Ayorekire et al., 2021). In 2020, the hotel business in Uganda performed badly, like elsewhere in the world (Byamugisha, 2021). It experienced 80 percent cancellations of bookings and also sent home about 57 percent of staff on unpaid leave. Due to a 73.3% decrease in international arrivals in 2020 compared to 2019, the pandemic substantially impacted the commercial stability of hotels. A danger to their resilience is the fact that more than 50% of hospitality players, such as hotels, have closed, and the remaining ones are only working at 50% capacity (Uganda Bureau of Statistics, 2021).

As the curtains came down on 2020, there was a spark of hope. After staying at home since the pandemic took hold at the start of the year, many Ugandans and foreigners were hoping to travel. To connect with and serve their customers, hotels used contactless technology. Some hotels have even gone so far as to diversify their income streams by adding new services like virtual meetings, hybrid events, and outdoor dining experiences, among others, but this has not saved the hotel industry. This prompted the researcher to examine the relationship between management agility, complexity adaptability, and business resilience in hotels that operate in Kampala Metropolitan.

1.3 Statement of the Problem

There are various factors worldwide that contribute to business resilience, such as strategic planning, diversity, risk management, and innovation (Gulati et al., 2019). During the COVID-19 pandemic alone, over 100,000 small businesses, mostly Hotels and restaurants in the US closed permanently, and it is estimated that up to 60% of hotels and restaurants in Europe closed (McKinsey, 2020). In Africa, the hospitality sector lost over \$80 billion in revenue in 2020 due to the pandemic (World Travel and Tourism Council, 2020). Hotels, in particular,

experienced a significant decline in business as travel restrictions and lockdowns led to a decrease in bookings and cancellations of existing reservations (Klioutchnikova & Gluschenko, 2021). Approximately 2,000 hotels are closing and 100,000 direct jobs are being lost due to the COVID-19 pandemic (African Development Bank Group, 2020). In Uganda, the hospitality industry for the last three years has been the hardest hit. Hotels, which provide affordable accommodation for travellers, have been particularly vulnerable due to travel restrictions and reduced demand due to COVID-19 (Ayorekire et al., 2021). The pandemic significantly threatened the business resilience of hotels due to a drop in the number of international arrivals by 73.3% in 2020 compared to 2019. Over 50% of hospitality players like hotels closed, and the rest are operating at an occupancy rate of 30% below the 70%–80% global recommendation, which is a threat to their resilience (Uganda Bureau of Statistics, 2022). The managers of hotels have employed agile management practices to enable hotels to effectively navigate complexities, embrace change, and identify emerging opportunities. Some hotels have gone ahead and diversified their revenue streams by offering new services such as virtual meetings, hybrid events, and outdoor dining experiences in order to remain resilient (Odogui, Ameh, & Ogba, 2020). However, what was not clear was how these management agility and complexity adaptability forms relate to the resilience of hotels. Therefore, the researcher investigated how management agility and complexity adaptability predict business resilience.

1.4 Purpose of the Study

The purpose of this study was to examine the relationship between management agility, complexity adaptability and business resilience among hotels in Kampala Metropolitan.

1.5. Research Objectives

- i) To examine the relationship between management agility and business resilience in hotels in Kampala Metropolitan.
- ii) To assess the relationship between management agility and complexity adaptability in hotels in Kampala Metropolitan.
- iii) To investigate the relationship between complexity adaptability and business resilience in hotels in Kampala Metropolitan.
- iv) To assess the mediating role of complexity adaptability on the relationship between management agility and business resilience in hotels in Kampala Metropolitan.

1.6 Research questions

- i) What is the relationship between management agility and business resilience in hotels in Kampala Metropolitan?
- ii) What is the relationship between management agility and complexity adaptability in hotels in Kampala Metropolitan?
- iii) What is the relationship between complexity adaptability and business resilience in hotels in Kampala Metropolitan?
- iv) What is the mediating role of complexity adaptability on the relationship between management agility and business resilience in hotels in Kampala Metropolitan?

1.7 Hypotheses

H₁: There is a positive relationship between management agility and business resilience in hotels.

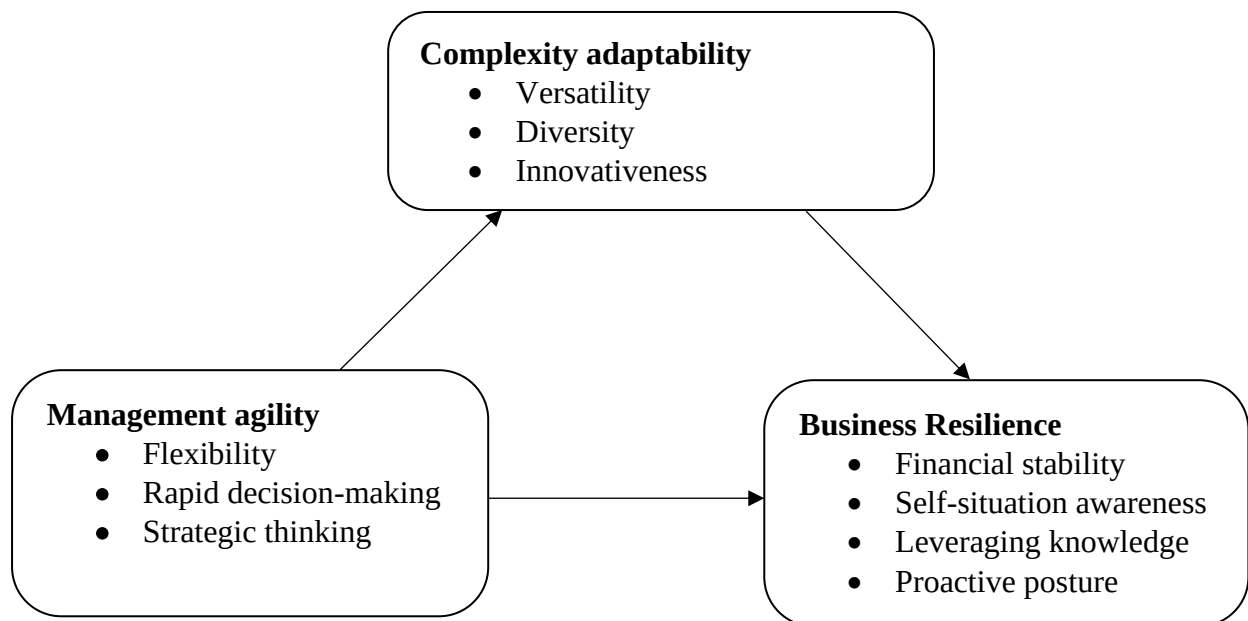
H₂: There is a positive relationship between management agility and complexity adaptability in hotels.

H₃: There is a positive relationship between complexity adaptability and business resilience in hotels.

H4: Complexity adaptability mediates the relationship between management agility and business resilience in hotels.

1.8 Conceptual framework

This study followed a conceptual framework developed by the researcher in regard to the concepts of management agility, complexity adaptability and business resilience in hotels in Kampala Metropolitan.



Source: Huang & Tsai, (2019), Lee & Choi, (2015) Chung & Koo, (2015), Kim & Ritchie, (2013), Ritchie & Jiang, (2019), Gursoy, Chi & Lu, (2013).

Figure 1: Conceptual framework

The management agility, which was the independent variable, was based on Huang & Tsai's (2019) measurement of flexibility, rapid decision-making, and strategic thinking. Then the complexity adaptability, which was the mediating variable, was measured by Lee & Choi (2015), Chung & Koo (2015), and Kim & Ritchie (2013) in terms of adaptability, diversity, and innovativeness. On the other hand, the business resilience of SMEs, which was the dependent variable, was based on Ritchie & Jiang (2019) and Gursoy, Chi & Lu (2013), measured in the form of financial stability, self-situation awareness, leveraging knowledge,

and proactive posture. The researcher examined all the variables in the hotels that operate in Kampala Metropolitan.

1.9 Scope of the Study

1.9.1 Geographical Scope

The study was conducted in hotels ranging from one-star hotels to four-star hotels that operate in Kampala Metropolitan, which comprises Kampala, Wakiso districts, and Mukono districts. This was because 98% of the hotels in Uganda range from 1-4 stars. 1-3-star hotels tend to focus on people of relatively lower incomes or locals, while 4-star hotels tend to focus on the high-end and luxury class, like tourists from outside countries, as they tend to charge in foreign currencies. The study was carried out in Kampala Metropolitan because it hosted almost 60 percent of the best hotels in Uganda.

1.9.2 Content Scope

The main objective of this study was to investigate the relationship between management agility, complexity adaptability, and business resilience. The motivation behind conducting this research was the observed rise in hotel failures and underperformance due to a lack of resilience. However, the specific connection between management agility, complexity adaptability, and business resilience remained unclear. Hence, this study aimed to determine the precise relationship that exists among these variables.

1.9.3 Time scope

The study was conducted over a period of one year, which was between March 2023 and March 2024. It focused on literature from 2018–2022, not only because it was recent to offer up-to-date information but also because it was a period when hotels in Uganda experienced different business situations. From 2018–2019, hotels received the highest number of bookings; from

2020–2021, hotels experienced the smallest number of bookings and hardships in their operations; and in 2022, the hotel industry started to recover from COVID-19 shock.

1.10 Significance of the Study

This study is intended to inform policymakers in the hospitality industry about the importance of agility, adaptability, and resilience in managing hotel businesses. It will help them develop policies that encourage and incentivize hotels to adopt practices that enhance their ability to respond to unexpected challenges and changes in the market.

The findings of this study are hoped to be useful to hotel managers and owners in developing strategies that improve their business resilience. It will help them understand the factors that contribute to resilience and how they can develop the necessary skills and capabilities to manage their hotels in a dynamic and ever-changing environment.

This study is hoped to contribute to academic research in the fields of hospitality management, organizational behaviour, and strategic management. It will help researchers develop theories and models that explain the relationship between agility, adaptability, and resilience in hotel businesses. It will also inspire further research on the best practices for managing hotels in a rapidly changing environment and will act as a source of literature for future studies.

1.11 Justification of the Study

Businesses that adopt management agility and complexity adaptability stand a chance to be resilient (African Development Bank Group, 2020). However, businesses, mostly hotels, fail to be resilient when faced with shocks and disasters. Therefore, this study was necessary to create awareness among business owners about how management agility and complexity adaptability influence business resilience in the hotel sector. Furthermore, from the reviewed literature, much of the studies, such as those by the those by the European Commission (2021),

Zhang et al. (2021), Liu, Chen & Wang (2020), Okumus, Altinay, and Roper (2020), Adun, Ojo, and Adeniji (2020), the American Hotel & Lodging Association (2020), Shao, Wei, & Liu (2019), and Folly et al. (2019), among others, were carried out in foreign countries, hence creating a literature gap on the Ugandan content regarding management agility, complexity adaptability, and business resilience. Having stated that, there was no single study that combined the entire three variables like this current study. That said, no study had been conducted in Uganda focusing on the resilience of hotels. As a result, this current study examining the relationship between management agility, complexity adaptability, and business resilience in hotels that operate in Kampala Metropolitan was necessary to bridge the information gap in the hotel sector regarding such study variables.

1.12 Operational definitions of concepts

Management agility: This is understood as the ability of a manager or management team of an organisation to respond quickly and effectively to changes in the business environment (Huang & Tsai, 2019).

Complexity adaptability: This is understood as an organisation's ability to navigate complex and uncertain situations (Lee & Choi, 2015).

Business resilience: This is understood as an organization's ability to withstand and recover from disruptions and challenges (Ritchie & Jiang, 2019).

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents literature reviews on the relationship between management agility, complexity adaptability and business resilience, with focus on both local and international sources. This was presented in the form of theoretical review, conceptual review, empirical review and literature gap.

2.2 Theoretical Review

This study was anchored on the Dynamic Capabilities Theory (DCT). This theory was first proposed by Teece, Pisano, and Shuen in their 1997 paper "Dynamic Capabilities and Strategic Management" and has since become a widely influential perspective in management and strategy research. DCT suggests that a firm's ability to create and deploy dynamic capabilities is essential for achieving and maintaining competitive advantage (Teece et al., 1997). Dynamic capabilities refer to an organisation's capacity to sense and respond to changes in its environment, reconfigure its resources and capabilities, and ultimately shape its competitive position (Helfat & Peteraf, 2015). The dynamic capabilities are characterised by three key processes: sensing opportunities and threats, seizing opportunities, and reconfiguring the organisation's resources and capabilities. The sensing process involves the identification and interpretation of changes in the external environment, as well as the evaluation of the organisation's internal strengths and weaknesses. The seizing process involves taking action to capitalise on new opportunities or mitigate threats, often through strategic investments in new capabilities and partnerships. The reconfiguration process involves adjusting and aligning the organisation's resources and capabilities to support the achievement of its strategic goals (Helfat & Peteraf, 2015).

Businesses need to understand opportunities and threats in order to remain competitive and adaptable in a changing work environment. To do this, they must develop dynamic capabilities, which involve sensing opportunities and threats, reconfiguring strategies and structures, and ultimately enhancing business resilience (Kurtz & Varvakis, 2016). Several empirical studies have provided support for the DCT. For example, Zhang et al. (2019) found that firms that were able to adapt their resource base in response to changing market conditions outperformed their peers over time. Similarly, Helfat et al. (2017) found that firms with greater dynamic capabilities were more likely to successfully enter new markets and launch new products.

This theory holds significance for the study as it provides a valuable framework for comprehending the intricate interplay between management agility, adaptability to complexity, and the resilience of businesses, particularly within the hotel sector.

DCT suggests that dynamic capabilities are important antecedents for management agility, as they help organisations cope with dynamic environments through management being flexible enough with a rapid decision-making environment and strategic thinking. In the dynamic and fiercely competitive landscape of hospitality, characterised by continual shifts in consumer preferences, market dynamics, and environmental influences, the capacity to sense, seize, and adaptively reconfigure resources and capabilities is paramount.

Through the application of dynamic capabilities, hotels are able to adapt to the changing environment, encourage diversity of different perspectives and knowledge, and create innovativeness for new ideas, processes, and services. Hotels adeptly realign their strategies and organisational structures to capitalise on emerging opportunities while mitigating potential threats, thereby bolstering their resilience amidst uncertainty.

DCT emphasises the imperative for hotels to nurture dynamic capabilities to effectively navigate complexities, swiftly adapt to evolving circumstances, and ultimately maintain a competitive edge in an ever-evolving business milieu. Consequently, this approach can lead to heightened financial stability, enhanced self-situation awareness, knowledge leverage, and a proactive posture within hotels.

2.3 Conceptual Review

This section captures the conceptual review based on the study variables.

2.3.1 Management agility

Management agility is the ability of an organisation to rapidly and effectively respond to changes in the market, customer needs, technology, or any other external or internal environment (McKinsey, 2020). It involves the capability to sense, understand, and respond to changes in a timely and effective manner. Management agility requires flexibility, adaptability, and responsiveness to succeed in today's volatile business environment. It is critical for organisations to be agile to remain competitive in today's fast-paced business environment, and it is looked at in the dimensions of flexibility, rapid decision-making, and strategic thinking.

(i) Flexibility

Flexibility is understood as an organization's ability to adapt and respond effectively to changes in its internal and external environments. It involves the capacity to adjust strategies, structures, processes, and resources in order to capitalise on opportunities and mitigate risks. Flexible organisations have the ability to make quick decisions in response to changing conditions. According to a study by Turturea and Hurbean (2020), flexible organisations are more likely to have managers who exhibit fast decision-making capabilities, resulting in better resource allocation, adaptability, and competitiveness.

(ii) Rapid decision-making

Rapid decision-making can be referred to as the capacity of managers and leaders to act swiftly and decisively in response to shifting conditions and time-sensitive events (Hottenrott et al., 2020). It involves gathering relevant information, analysing it efficiently, and taking action promptly. Rapid decision-making is crucial for management agility, as it allows organisations to seize opportunities and address challenges in a timely manner.

(iii) Strategic thinking

Strategic thinking is acknowledged as the capacity for managers and leaders to analyse complex situations, see long-term objectives, and create successful plans to reach those objectives (Dranikoff et al., 2019). It involves gathering and evaluating information, identifying patterns and trends, considering alternative scenarios, and making informed decisions to guide the organisation's direction. Strategic thinking is closely linked to management agility, as it enables organisations to proactively adapt to changing environments and seize emerging opportunities.

2.3.2 Complexity adaptability

According to Kiel and Elliott (2018), complexity adaptability is described as the ability of an organization to sense and respond to changes in its environment by adapting its structure, processes, and behaviours. In other words, complexity adaptability is a dynamic process of continuous learning and adaptation to the changing environment. Similarly, Yoon and Song (2018) defined complexity adaptability as the ability of a system to maintain its functionality in the face of complex and unpredictable events by flexibly adjusting its behaviour and structure. There are several measures, including the Complexity Adaptability Index (CAI) developed by Kiel and Elliott (2018) and the Complexity Adaptation Capability (CAC) proposed by Yoon and Song (2018). The CAI measures the degree to which an organisation is

capable of adapting to changes in its environment by assessing its ability to sense, learn, and respond to complex situations. The CAC, on the other hand, measures the ability of a system to adjust its structure and behaviour in response to changes in the environment. However, complexity adaptability are largely measured in the dimensions of adaptability, diversity, and innovativeness.

(i) Versatility

Versatility is regarded as the capacity of individuals, teams, and organizations to adjust and thrive in response to changing circumstances and uncertain environments (Aube & Rousseau, 2020). It involves being open to new ideas, being able to learn and acquire new skills, and being willing to modify strategies and approaches as needed in dynamic situations.

(ii) Diversity

Diversity refers to the presence of individuals from different backgrounds, perspectives, and characteristics within a group or organisation (Zhang et al., 2022). It encompasses a variety of dimensions, including but not limited to gender, ethnicity, age, culture, education, and expertise. A study by Fernandes et al. (2018) suggests that diversity is an indicator of complexity adaptability as it brings a variety of perspectives, knowledge, and problem-solving approaches, enabling organisations to effectively tackle complex challenges.

(iii) Innovativeness

Innovativeness is described as the ability to create and implement new ideas, processes, products, or services that lead to improvements or advancements. Innovativeness can manifest in various forms, such as technological innovations, business model innovations, or social innovations. Innovativeness requires thinking outside the box and finding unique solutions to challenges. This ability to think creatively and approach problems from different angles is essential in complex and ambiguous situations (Geraldi, Söderlund, & Maylor, 2018).

2.3.3 Business resilience

Business resilience as a multidimensional concept encompasses the capacity of an organization to anticipate, prepare for, and respond to disruptive events while maintaining critical business functions (Zobel, 2018). Resilience involves a proactive approach that goes beyond mere risk management to create a culture of resilience within an organization. This culture is characterised by flexibility, adaptability, and a willingness to embrace change and learn from past experiences (Martin & Cheah, 2018). The components of business resilience can be broadly categorized into three areas: preparedness, response, and recovery (Zobel, 2018). Preparedness involves identifying potential risks, developing contingency plans, and building a culture of resilience within the organization. Response involves executing these plans when a disruptive event occurs, while recovery involves restoring critical business functions and returning to normal operations. Therefore, business resilience is looked at in the dimensions of financial stability, self-situation awareness, leveraging knowledge, and proactive posture.

(i) Financial stability

Financial stability is understood as the ability of a financial system or institution to withstand external shocks and maintain its core functions and integrity. It encompasses the ability of financial intermediaries, such as banks, to provide essential financial services and meet the needs of households, businesses, and the overall economy, even during times of stress (Ross, Westerfield, & Jordan, 2013). A financially stable environment ensures that businesses have access to credit when needed (Brigham & Ehrhardt, 2013). Adequate access to credit enables businesses to fund their operations, invest in new projects, and manage cash flow effectively.

(ii) Self-situation awareness

Self-situation awareness looks at an individual's ability to accurately perceive and understand their own internal states, external environment, and the context in which they are operating

(Day et. al., 2014). It involves being cognizant of one's own thoughts, emotions, and physical condition, as well as the relevant situational factors. An indicator of business resilience is a measure or characteristic that can provide insights into an organisation's ability to withstand and recover from disruptions, challenges, or adverse events. When individuals are aware of their own states and the context in which they are operating, they are better equipped to identify risks, communicate effectively, collaborate, and take appropriate actions.

(iii) Leveraging knowledge

Leveraging knowledge looks at the strategic use and application of knowledge assets within an organization to enhance its competitive advantage and overall performance (Yuan et al., 2021). It involves collecting, organising, and disseminating relevant knowledge across different levels and functions of the business to support decision-making, innovation, problem-solving, and continuous learning.

(iv) Proactive posture

Proactive posture refers to an organisation's proactive and anticipatory approach to identifying, preparing for, and mitigating potential risks and disruptions. It involves actively seeking out and addressing vulnerabilities rather than simply reacting to events after they occur (Syed & Hazen, 2019). A proactive posture includes measures such as risk assessment, scenario planning, early warning systems, and the implementation of preventive strategies.

2.4 Empirical review

The empirical review captures the relationship between the study variables while following the order of study objectives.

2.4.1 Management agility and business resilience

According to Liu, Chen, and Wang (2020), in the study on the relationship between management agility and business resilience in the hotel industry in Taiwan, results showed that management agility positively influenced business resilience, indicating that hotels that were more agile in managing their relationships with stakeholders were also more resilient in the face of disruptive events. Similarly, Shao, Wei, & Liu (2019) in the hotel industry in China found that management agility positively influenced business resilience. They revealed that hotels that were more agile in managing their relationships with stakeholders were better able to learn from their experiences and develop strategies to improve their resilience over time.

Recent research has shown that relationship management agility is positively related to business resilience in hotels in Asia (Lee et al., 2019; Wang et al., 2020; Zhang et al., 2021). Management agility enables hotels to build trust and loyalty with customers, which reduces the impact of negative reviews, cancellations, and no-shows during crises. Furthermore, Zhang et al. (2021) revealed that management agility also enables hotels to collaborate with suppliers to ensure the availability and quality of essential resources, such as food, linens, and cleaning supplies, during disruptions.

A study by Liu (2018) found that hotels that were able to quickly adapt to changes in the market and customer needs were more likely to survive and thrive in the face of adversity. Similarly, Gupta (2019) found that hotels with strong relationships with their stakeholders were more likely to have access to resources and support during times of crisis, which enhanced their resilience. Okumus, Altinay, and Roper (2020) found that hotels that were able to quickly adapt their business models and operations to the COVID-19 pandemic were better able to cope with the crisis and recover more quickly than those that were slower to adapt. In addition, effective relationship management agility can enhance the ability of hotels to attract and retain

customers. Adun, Ojo, and Adeniji (2020) found that hotels that were able to quickly respond to customer needs and preferences were more likely to build customer loyalty and satisfaction, which in turn enhanced their resilience to competition and economic downturns.

Raza et al. (2020) suggest that there is a positive relationship between management agility and business resilience in hotels in Africa. Specifically, hotels that are more agile tend to be more resilient to disruptions. This is because agile hotels are better equipped to anticipate and respond to changes in market conditions and customer needs, which makes them more flexible and adaptable to disruptions. Moreover, agile hotels are better able to identify potential threats and opportunities and take quick action to mitigate risks or capitalise on opportunities. For instance, during the COVID-19 pandemic, hotels that were more agile were able to quickly pivot their business models to adapt to changing customer needs and health regulations, such as implementing contactless check-in and cleaning protocols (Sutton, 2020).

According to Aheisibwe et al. (2020), management agility is positively related to business resilience in Ugandan hotels. The study found that hotel managers who demonstrate high levels of agility are better able to respond to unforeseen events, such as pandemics, natural disasters, or political unrest, and maintain their business operations. Similarly, Nabuyungo and Kizza (2020) found that hotels that exhibit high levels of business resilience are more likely to be agile in their management practices. Hotels that are well-prepared for unexpected events and disruptions are better positioned to respond quickly and effectively to changes in the market and customer needs. Relatedly, Mugagga et al. (2019) revealed that agile and resilient hotels are better able to adapt to changing market conditions, meet customer needs, and maintain their competitive advantage in the industry.

2.4.2 Management agility and complexity adaptability

Research by Kandampully, Zhang, and Jaakkola (2017) suggests that management agility in hotels is positively associated with complexity adaptability, leading to an enhanced customer experience and increased loyalty. Agile management practices enable hoteliers to respond swiftly to changing guest preferences, market trends, and competitive dynamics (Wang & Nicoll, 2019). By embracing complexity adaptability, hotels can tailor their offerings, services, and experiences to meet the diverse needs and expectations of guests. This proactive approach fosters customer satisfaction, loyalty, and positive word-of-mouth referrals, ultimately driving repeat business and revenue growth.

According to findings by Devie, Kwistianusn, and Wellyani (2023), management agility correlates with complexity adaptability in hotels, resulting in improved operational efficiency and cost optimization. Agile hotel management teams demonstrate the ability to streamline processes, allocate resources effectively, and adapt quickly to evolving operational challenges. By embracing complexity adaptability, hotels can navigate intricate operational environments, such as fluctuating demand patterns, supply chain disruptions, and regulatory changes (Hong & Kang, 2020). This adaptability enables hotels to optimise resource utilisation, minimise waste, and enhance productivity, leading to reduced costs and improved profitability.

Research by Li and Zhang (2021) highlights the link between management agility and complexity adaptability in driving innovation and competitive advantage in hotels. Agile hotel management fosters a culture of innovation, experimentation, and continuous improvement, enabling the organisation to adapt to emerging trends and seize new opportunities. By embracing complexity adaptability, hotels can effectively manage the complexities inherent in the hospitality industry, such as evolving guest preferences, technological advancements, and market disruptions (Azeem, Ahmed, Haider, & Sajjad, 2021). This adaptability empowers

hotels to innovate their products, services, and business models, gaining a competitive edge in the market and enhancing long-term sustainability.

Additionally, Senbeto and Chan (2021) revealed that management agility is closely linked to complexity adaptability, enabling hotels to build resilience and effectively manage crises. Agile hotel management teams demonstrate the ability to anticipate, prepare for, and respond to unexpected disruptions, such as natural disasters, economic downturns, or public health crises. With complex adaptability, hotels can develop robust contingency plans, flexible operating models, and cross-functional collaboration mechanisms (Chen & Choi, 2022). This adaptability enables hotels to navigate crises proactively, mitigate risks, and minimise the impact on operations, reputation, and financial performance.

2.4.3 Complexity adaptability, and business resilience

In the USA, hotels have faced significant challenges due to the pandemic, with many facing closures or reduced occupancy rates. However, some hotels have demonstrated adaptability and resilience by pivoting their business models to cater to new markets. According to a report by the American Hotel & Lodging Association (2020), some hotels have started to offer rooms as office spaces, while others have repurposed their properties as temporary housing for essential workers. In Europe, hotels have faced similar challenges, with many facing closures and reduced demand for services. However, according to a report by the European Commission (2021), hotels have also shown adaptability by adopting new technologies, such as contactless check-in and mobile room keys, to reduce the risk of infection and improve the guest experience. Additionally, hotels have also developed new services, such as home delivery of meals, to cater to changing customer needs.

Kim and Park (2020) conducted a study on the relationship between complexity adaptability, and business resilience in Korean hotels. The study found that hotels with high levels of

complexity tended to have higher levels of adaptability and were more resilient to unexpected events. They further revealed that hotels need to develop adaptable strategies to manage their complex environments effectively. Similarly, Hao et al. (2019) investigated the impact of organisational ambidexterity, which refers to an organisation's ability to explore new opportunities while exploiting existing ones, on business resilience in Chinese hotels. The study found that organizational ambidexterity was positively related to business resilience, suggesting that hotels that were able to balance exploration and exploitation were more resilient to unexpected events. The authors suggested that hotels should adopt a strategic approach that balances exploration and exploitation to increase their resilience.

Another study conducted by Choi (2021) examined the role of organizational learning in the relationship between complexity adaptability, and business resilience in Singaporean hotels. The study found that organisational learning played a mediating role in the relationship between complexity adaptability, as well as between adaptability and business resilience. The findings suggested that hotels that fostered a culture of learning were better equipped to adapt to changes in their environment and, in turn, were more resilient to disruptions. Deloitte (2021) examined the impact of the COVID-19 pandemic on the hotel industry in Africa. The report highlighted the importance of resilience in navigating the crisis and identified several factors that contribute to resilience, including financial flexibility, operational agility, organisation learning, and stakeholder engagement. The report also emphasised the need for hotels to embrace digital transformation and innovation to enhance their adaptive capacity and resilience.

Folly et al. (2019) revealed that in Ghana, environmental complexity, including economic, political, and social factors, had a negative impact on hotel performance. However, hotels with higher adaptability were able to mitigate the negative effects of complexity and maintain high

levels of performance. Another study by Zerihun and Ingida (2020) investigated the role of organisational complexity in hotel innovation in Ethiopia. The study found that organisational complexity, including the number of departments and the level of formalisation, had a positive impact on hotel innovation. The study also found that adaptability mediated the relationship between organisational complexity and hotel innovation, suggesting that adaptive capacity is critical for harnessing the benefits of complexity.

Namugenyi and Mwesige (2021) assert that complexity in the hotel industry in Uganda reveals that complexity adaptability is interdependent and that hotels need to develop adaptive capabilities to deal with complex environments. They suggest that hotels can develop adaptive capabilities by fostering a culture of innovation, investing in technology, and training employees to be flexible and responsive to changing circumstances. Similarly, Kyakulumbye et al. (2020) found that adaptability is a critical factor in promoting business resilience in hotels. It was revealed that hotels need to be able to adapt to changing customer needs, market conditions, and regulatory requirements to survive in a competitive business environment. They also argued that hotels can enhance their adaptability by investing in technology, developing strategic partnerships, and fostering a culture of continuous improvement.

2.4.4 The mediating role of complexity adaptability in the relationship between management agility and business resilience in hotels

Chen and Lopes de Sousa (2020) Agile management practices play a crucial role in enabling hotels to effectively adjust to the intricate nature of the business environment. Through agility, hotels are capable of identifying and promptly responding to emerging trends, capitalising on technological advancements, and efficiently managing both internal and external complexities. On the other hand, complexity adaptability supports and reinforces management agility by providing the essential knowledge, processes, and structures necessary to navigate and embrace

complexity. Another study conducted by Hoque, Verreynne, and Connelly (2020) delved into the mediating role of complexity adaptability on relationship management agility and business resilience. The findings revealed that agile hotels are better prepared to tackle disruptions and crises due to their flexibility and capacity to swiftly adapt operations, reconfigure resources, and implement contingency plans. Complexity adaptability plays a complementary role by assisting these hotels in anticipating and managing a wide array of complexities. By doing so, it mediates how management agility influences overall business resilience by mitigating vulnerability to disruptions.

Relatedly, Odogui, Ameh, and Ogba (2020) revealed that agile management practices enable hotels to effectively navigate complexities, embrace change, and identify emerging opportunities. Complexity adaptability, on the other hand, provides the necessary tools, processes, and capabilities that managers use to manage and respond to complex challenges, such as cultural diversity, regulatory changes, and technological advancements. In turn, business resilience is influenced by the fact that agile hotels can swiftly respond to disruptions and crises by adapting their operations, reallocating resources, and implementing effective contingency plans. Complexity adaptability, by helping hotels navigate and manage various complexities, contributes to their overall resilience by reducing vulnerability and enhancing their ability to withstand and recover from adverse events (Um, Wachowiak, & Kim, 2019).

Similarly, Wang et al. (2021) revealed that agile management practices enable hotels to effectively adapt to the complexities of the business environment in Uganda. By being agile, hotels can identify and respond to emerging trends, leverage technological advancements, and efficiently manage internal and external complexities. Conversely, complexity adaptability supports management agility by providing the necessary knowledge, processes, and structures to navigate and embrace complexity. In turn, Aldehayyat et al. (2021) revealed that agile hotels

in Uganda are better equipped to respond to disruptions and crises, as they have the flexibility and capability to quickly adjust operations, reconfigure resources, and implement contingency plans. This cannot be achieved without complexity adaptability to help hotels anticipate and manage a wide range of complexities, which contributes to their overall resilience by reducing vulnerability to disruptions.

2.5 Conclusion

The literature reviewed above revealed that there are some studies that have been carried out in relation to study variables such as management agility, complexity adaptability, and business resilience. While this may be true in some developed countries such as America, Europe, Nigeria, Ghana, Brazil, and China, among others, as seen in the literature of the European Commission (2021), Zhang et al. (2021), Liu, Chen, and Wang (2020), Okumus, Altinay, and Roper (2020), Adun, Ojo, and Adeniji (2020), the American Hotel & Lodging Association (2020), Shao, Wei, and Liu (2019), and Folly et al. (2019), there are few studies that have been conducted in developing nations like Uganda. Having stated that, even though the literature reviewed above revealed that there are various studies in place that have successfully been looked at, there is no single study that combined all three variables of management agility, complexity adaptability, and business resilience. That said, no study has been conducted in Uganda focusing on the business resilience of hotels. Overall, this makes the literature lack the empirical truth of what is happening in Uganda and, more specifically, in the hotel industry where this current study will be conducted. Thus, the information in the literature could not be generically used to explain the study variable from the Ugandan and hotel industry perspectives. As a result, the goal of this research was to fill that literature gap by examining the relationship between management agility, complexity adaptability, and business resilience among hotels in Kampala Metropolitan.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter presents the research design, study population, determining sample size, sampling techniques, sources of data, data collection methods and tools, data collection procedures, data quality control, data analysis, presentation, measurement of variables and ethical consideration.

3.2 Research approach

The study used a quantitative research approach to investigate the relationship between management agility, complexity adaptability, and business resilience in the hotel industry. The quantitative approach was chosen with the intention of obtaining unbiased results that could be generalized to a larger population. By employing a quantitative approach, the researcher collected numerical data related to the study variables. The quantitative research approach enabled statistical analysis to extract meaningful relationships between the study variables.

3.3 Research design

In this study, the researcher utilised a cross-sectional survey design. This research design enables data collection from different individuals at a single point in time using the same data collection tool (Kothari, 2014). The choice of a cross-sectional survey was motivated by its ability to efficiently gather a large amount of data from the field. The study concentrated on elucidating and inferring from the findings the relationships among management agility, complexity adaptability, and business resilience.

3.4 Study population

Population is defined as a group of individual objects or items from which samples are taken for measurement (Kombo and Tromp, 2016). There are 188 registered hotels in Kampala Metropolitan (Kampala District, Wakiso District, and Mukono District). The hotel category was 1-4 star hotels because about 99 percent of hotels in Uganda fall in this range (Uganda Hotel Owners Association Report, 2021). 1-3-star hotels tend to focus on people of relatively lower incomes, while the rest tend to focus on the high-end and luxury class, like tourists from outside countries.

Table 3.1: Number of Hotels in Kampala Metropolitan

District	Division/Municipality	Number of Hotels
Kampala	Nakawa	24
	Lubaga	14
	Makindye	16
	Kawempe	18
	Central	27
Wakiso	Entebbe	25
	Nansana	10
	Kira	19
	Makindye Ssabagabo	07
Mukono	Mukono Municipality	28
Total		188

Source: Uganda Hotel Owners Association Report (2021)

3.5 Sample size determination

A sample size is a group of individuals, objects, or items that are selected from the general population and are considered representative of the real population for that specific study (Mbabazi, 2011). The unit of analysis in this study was the selected hotels, while the unit of inquiry was staff members in the selected hotels. Therefore, a total of 127 hotels were considered a sample. The sample size was reached based on Krejcie and Morgan (1970), as presented below.

Table 3.2: Sample size

District	Division/Municipality	Number of Hotels	Samples size
Kampala	Nakawa	24	16
	Lubaga	14	09
	Makindye	16	11
	Kawempe	18	12
	Central	27	18
Wakiso	Entebbe	25	17
	Nansana	10	07
	Kira	19	13
	Makindye Ssabagabo	07	05
Mukono	Mukono Municipality	28	19
Total		188	127

Source: Uganda Hotel Owners Association Report (2021)

Accordingly, Roscoe (1975) opined that sample sizes of less than 10 are not recommended in any research study. In research with tight controls, successful research can be conducted with samples as small as 10 and above. However, for most studies, a sample size between 30 and 500 has been most appropriate. In this study, two people were purposefully selected from each of the 127 selected hotels, targeting the management and finance departments in each hotel.

Total number of targeted respondents = 02 people x 127 Hotels

= 254 Respondents

Therefore, 254 people were selected from the targeted hotels to participate in the study.

3.6 Sampling technique

The multistage sampling method was used, whereby a simple random sampling technique was used in this study to select the hotels. Simple random sampling is the technique where all the elements in the population target have an equal chance of being part of the study (Kombo & Tromp, 2016). However, when selecting the respondents, purposive sampling was employed. Respondents were purposefully selected from departments of management and finance in every selected hotel. This means that only people with a deep understanding of management agility, complexity adaptability, and business resilience were considered. This facilitated the collection of more accurate information.

3.7 Sources of data

3.7.1 Primary source

Primary sources were the original materials on which research was based. They were first-hand testimony or direct evidence concerning a topic under consideration. Primary data sources present information in its original form, neither interpreted nor condensed or evaluated by other writers (Amin, 2005). The researchers used the questionnaires in the field to collect data from the respondents. This data was the basis of the study.

3.7.2 Secondary source

Secondary sources offer interpretation or analysis based on primary sources. They may explain primary sources and often use them to support a specific thesis or argument or to persuade the reader to accept a certain point of view (Amin, 2005). Other publications from secondary sources like dissertations, journals, reports, and the internet were accessed to obtain relevant information.

3.8 Data collection method

The study employed a questionnaire-survey method. According to Amin (2005), a questionnaire survey refers to a method of data collection that is designed with a series of short questions using both open-ended and closed-ended questions to allow prompt answers from respondents. However, in this study, closed-ended questions were used. It allowed easy correlation and regression of the respondent's attitudinal disposition on the independent and dependent variables. This method was employed with the targeted participant. The use of questionnaires allowed busy respondents to adequately reserve time to answer the questions in their convenient hours (Oso & Onen, 2010). Besides that, the method was fast and economical.

3.9 Data collection tool

The study used a questionnaire to collect data from the field. The questionnaire is a tool for data collection; it refers to a compilation of questions that helps the researcher gather the necessary research data for the study. It can either be open-ended, closed-ended, or both (Mugenda & Mugenda, 2013). The research tool that was used for this study was a closed-ended questionnaire and will be self-administered since the targeted categories have the capacity to read and write. The questionnaire was designed according to the Likert scale, with responses ranging from strongly disagree, disagree, neutral, agree, and strongly agree on a 1, 2, 3, 4, and 5 rating scale, respectively. The closed-ended questions were used to limit respondents from giving irrelevant information. This method of data collection was also preferred because it gives a great degree of assurance to the anonymity and confidence of the research respondent.

3.10 Data collection procedure

After the approval of the research proposal and the data collection tools by the supervisors, the researcher obtained an introductory letter from Kyambogo University so as to officially be introduced to the management of selected hotels when seeking permission to conduct the study in that organization. After getting permission and consent from respondents, the researcher embarked on data collection through distributing questionnaires. However, before carrying out the main study, the researcher carried out a pilot study to test the data collection tools, which was to improve the validity and reliability of the study. The members that took part in the pilot study were not part of the main study.

3.11 Data quality control

The quality of the study is very important for every research project, and it was done by ensuring the validity and reliability of the study tool (Yin, 2014).

3.11.1 Validity

Validity is the ability of the tool to measure with the highest level of accuracy the aspect that it's meant to measure (Trochim, 2009). To attain the validity of the questionnaire, it was given to four research experts at the level of research supervisors at Kyambogo University, including my supervisors, for a face-to-face or expert knowledge validity test to rank the items either relevant (R) or irrelevant (IR). The Content Validity Index (CVI) for the questionnaire was computed to ascertain content validity, where $CVI = R/(R+IR)$. In addition, Mugenda & Mugenda (2013) recommend that a content valid index of 0.7 qualifies the tool as a valid instrument, and all the items scored CVIs that were above 0.7, as shown in Table 3.3 below.

Table 3.3: Validity Test of Tools

Construct	Total Items	Relevant Items	Items that needed adjustments	CVI
Management Agility	15	13	02	0.86
Complexity Adaptability	14	12	02	0.86
Business Resilience	18	15	03	0.83

However, appropriate adjustments were made to increase the tool's validity on questions that were ranked irrelevant.

3.11.2 Reliability

Reliability refers to the degree to which a set of variables are consistent with what they are intended to measure. In order to establish the reliability, the pilot test was done on 10 hotel staff that were not to be part of the main study. The results of the pre-testing exercise were entered into SPSS Ver. 23, and tested for their reliability basing on the Cronbach reliability test scores (alpha values). The tool was considered reliable because Alpha Values above 0.7 as recommended (Mugenda & Mugenda, 2013).

Table 3.4: Reliability Test of Tools

Construct	Item tested	Alpha values
Management Agility	15	.735
Complexity Adaptability	14	.771
Business resilience	17	.818

3.12 Measurement of study variables

Management agility

In this study, management agility was measured using items of flexibility, rapid decision-making, and strategic thinking as suggested by different scholars, such as Huang and Tsai (2019). The items measuring the variable were ranked on a Likert five-point scale, where 5 strongly agree, 4 agree, 3 are neutral, 2 disagree, and 1 strongly disagree.

Complexity adaptability

The complexity of adaptability in this study was measured based on items such as versatility, diversity, and innovativeness as suggested (Lee & Choi, 2015; Chung & Koo, 2015; Kim & Ritchie, 2013). A five-point Likert scale was used, where 5 strongly agree, 4 agree, 3 are neutral, 2 disagree, and 1 strongly disagree.

Business resilience

Business resilience in this study was measured using the dimensions of financial stability, self-situation awareness, leveraging knowledge, and proactive posture as put forward by Ritchie & Jiang (2019; Gursoy, Chi, & Lu, 2013). The items of business resilience were ranked on a Likert five-point scale, where 5 strongly agree, 4 agree, 3 are neutral, 2 disagree, and 1 strongly disagree. Full details were attached to the questionnaire (*Appendix II*).

3.13 Data analysis and presentation

According to Kothari (2014), data analysis refers to the systematic organisation and synthesis of research data and the testing of hypotheses in order to gain information pertinent to a given research question. The researcher scrutinised the returned questionnaires for completeness and consistent answers. This step entailed closed-checking of the questionnaire items in order to identify the ones that have been left blank or incomplete and the legibility of any items wrongly responded to. Descriptive statistics, correlations, and multiple regression analyses were used to analyse the raw data. Raw data were then entered into SPSS V.20.0 and analysed for descriptive and inferential statistics such as percentages, correlations, and regression. The data was analysed for Pearson correlations to determine the degree of linear dependence between the independent and dependent variables. This technique was used because it is efficient and gives a straight-forward formal analysis. A linear regression was run to determine how much each of the independent variables predicted the dependent variable. The findings were presented in tables and figures where necessary.

3.14 Ethical consideration

According to Creswell (2014), ethical consideration in any research is very critical. To an ethical researcher, confidentiality, consent of respondents, plagiarism, and respondents' privacy were upheld.

For confidentiality reasons, all the responses that were provided by the respondents to the questionnaire were only considered for academic purposes, and only parties that are directly linked to this study were given access to the data collected.

For one to take part in this study, he or she had to fill out the consent form. The researcher fully explained to the respondents their role and rights in the study. Only people who consented voluntarily were considered, while those who hesitated were dropped.

During the review of the literature of different researchers, scholars, and academicians, the researchers tried to rephrase and paraphrase their statements to avoid cases of plagiarism, and the research was tested for plagiarism using Turnitin to meet the similarity standards of Kyambogo University of 20%.

There was limited access to data collected from the field. After data collection, only the supervisor and other academic authorities directly connected to this study had access to the tools. Furthermore, the names of the respondents and any other information that could lead to tracing and identifying the respondent(s) were not indicated anywhere on the data collection tools.

3.15 Study limitation

Some respondents provided inaccurate or biased responses, consciously or unconsciously. The researcher addressed this limitation by implementing various measures, such as ensuring anonymity and confidentiality, using validated survey instruments, providing clear instructions, and employing independent data collectors.

There were inaccuracies or inconsistencies in the measurement of variables. However, the researcher overcame this by using reliable and valid measurement tools and employing standardised procedures. The researcher conducted pilot studies to identify potential measurement issues and refine measurement instruments before the main data collection.

The study depended on self-reporting measures, which were influenced by response bias. This bias occurred when participants provided inaccurate or socially desirable responses, resulting in distorted findings. To mitigate this issue, the researcher employed survey methods that ensured anonymity or confidentiality. By guaranteeing the participants' anonymity or

maintaining the confidentiality of their responses, the study aimed to reduce the influence of social desirability bias.

CHAPTER FOUR
PRESENTATION, ANALYSIS AND INTERPRETATION OF STUDY
FINDINGS

4.0 Introduction

This chapter captures the presentation, analysis, and interpretation of the study findings. The finding specifically captured the descriptive statistics on demographic characteristics of the respondents and then followed findings on objectives, which included examining the relationship between management agility and business resilience in hotels, the relationship between management agility and complexity adaptability in hotels, the relationship between complexity adaptability and business resilience in hotels, and the mediating role of complexity adaptability on the relationship between management agility and business resilience in hotels.

4.1 Response Rate

Table 4.1: Response rate

Table 4.1 below show the number of hotels that responded to the study.

Districts	Target	Acquired	Response Rate (%)
Kampala City	66	55	83.3
Wakiso	42	41	97.6
Mukono	19	13	68.4
Total	127	109	85.8

From Table 4.1 above, the response rate was 85.8 percent which was truly representative of the sample of hotels which the researcher sought to get data from. This was way above the 70 percent of the threshold, as recommended by the (Guttmacher Institute, 2006).

4.2 Demographic characteristics of respondents,

4.2.1 Sex of the respondents

Figure 2 below shows the sex of the respondents that took part in the study.

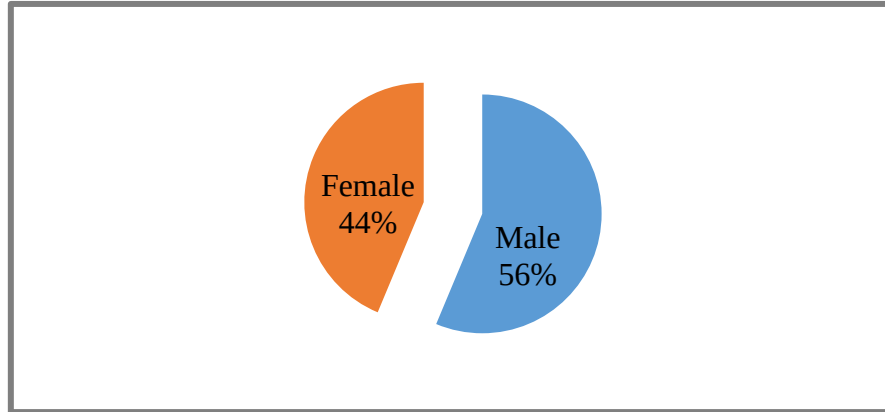


Figure 2: Sex of respondents

Source: Field data, 2023

Figure 2 above show that 56 percent of the respondents were male, whereas 44 percent were female, indicating a significant predominance of male representation in the study. This could be attributed to the fact that these hotels employ more men than women. This is because men are so flexible and energetic to handle the demanding tasks of running a hotel.

4.2.2 Marital status of the respondents

Figure 3 below shows the marital status of the respondents that took part in study.

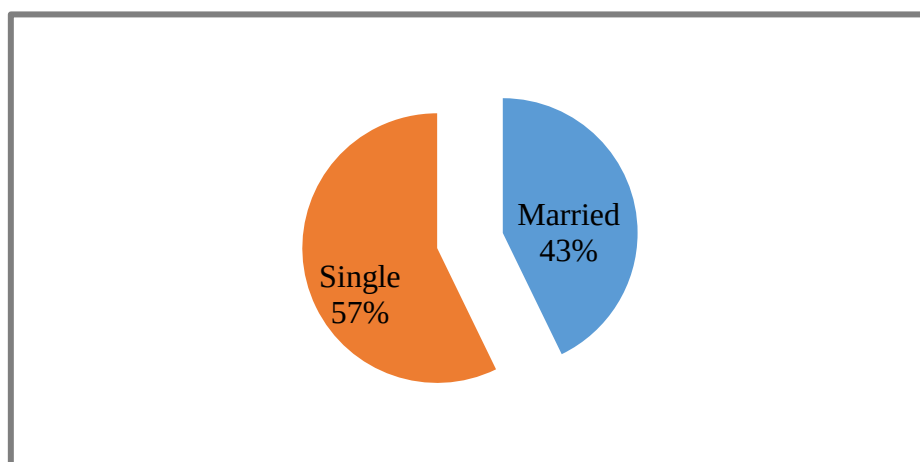


Figure 3: Marital status of the respondents

Source: Field data, 2023

Figure 3 above shows that 57.2 percent were single and that 42.8 percent were married. This showed that the majority were single an indication that they were relatively youthful people, energetic and committed to work than marriage people.

4.2.3 Age of the respondents

Table 4.2 shows the age of the respondents.

Table 4.2: Age of the respondents

Age of respondent	Frequency	Percent
18-27	52	23.4
28-37	89	40.1
38-47	58	26.1
48-57	20	9.0
58 and above	3	1.4
Total	222	100

Source: Field data, 2023

Table 4.2 above shows that 40.1 percent were 28-37 years, 26.1 percent were 38-47 years, 23.4 percent were 18-27, 9.0 percent were 48-47 years while only 1.4 percent were 58 years and above. This showed that the majority of the respondents were below 40 years. This implies that a significant majority of the respondents were in their youthful age a factor conducive to effectively handling the demanding responsibilities associated with running the hotel.

4.2.4 Highest level of education of the respondents

Figure 4 below shows the education level of the respondents.

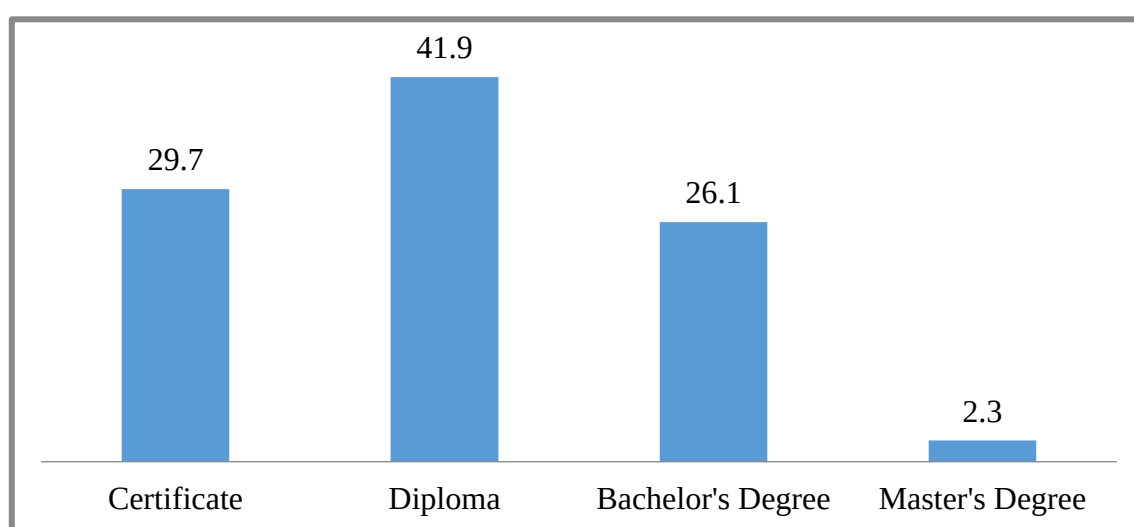


Figure 4: Education level of the respondents

Source: Field data, 2023

Figure 4 shows that 41.9 percent of the respondents possessed diplomas, 29.7 percent held certificates, 26.1 percent had bachelor's degrees, and 2.3 percent had master's degrees. This indicates that all participants were educated, an indication that educated staff can easily analyse the different situations at hand and offer the best solution for better services to clients.

4.2.5 Respondents' tenure with hotel

Table 4.3 below shows the respondents' tenure with the hotel.

Table 4.3: Respondents' tenure with hotel

Tenure with Hotel	Frequency	Percent
Less than 1	12	5.4
1-3	86	38.7
4-6	73	32.9
7-9	36	16.2
10 and above	15	6.8
Total	222	100

Source: Field data, 2023

Table 4.3 above shows that 38.7 percent had work experience ranging from 1 to 3 years, followed by 39.9 percent who had worked for a duration of 4 to 6 years, 16.2 percent had worked for 1-9 years, 6.8 percent had work for 10 years and above and only 5.4 percent had worked for less than a year. This implied most of the participants had worked with the hotel for more than a year. As a result, they had acquired an in-depth knowledge and understand of hotel business hence putting them in good position to give reliable performance.

4.3 Business Characteristics

4.3.1 Hotel Location

Table 4.4 below shows the location of the hotels that were considered in the study.

Table 4.4: Hotel location

		Kampala Capital City	Wakiso District	Mukono District	Total
Category of Hotel	One star	6	3	0	9
	Two star	19	26	3	48
	Three star	41	54	20	115
	Four star	35	11	4	50
Total		101	94	27	222

Source: Field data, 2023

Table 4.4 above shows that 101 were in Kampala Capital City, and these included six one-star hotels, 19 two-star hotels, 41 three-star hotels, and 35 four-star hotels. Wakiso District had 94 hotels, and these included 3 one-star hotels, 26 two-star hotels, 54 three-star hotels, and 11 four-star hotels. Then Mukono district had only 27 hotels, and these included 3 two-star hotels, 20 three-star hotels, and 4 four-star hotels. The majority of the hotels were located in Kampala, Capital City, because Kampala is the country's main business hub.

4.3.2 Number of Staff in the hotel

Figure 5 below presents the number of staff that the hotel had.

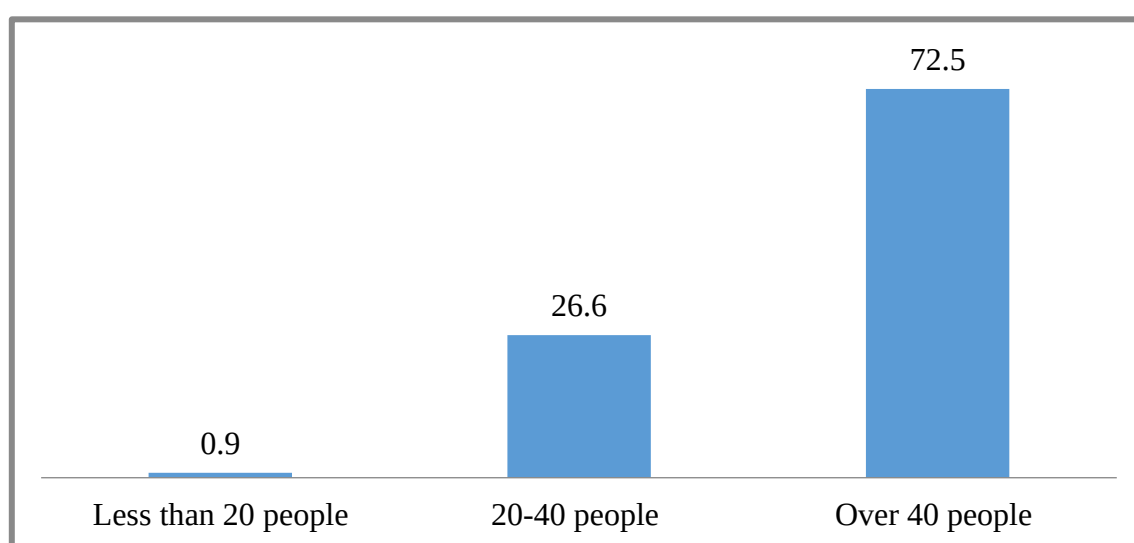


Figure 5: Number of Staff in the hotel

Source: Field data, 2023

Results in Figure 5 above showed that 72.5 percent of the hotels had staff more than 40 staff, 26.6 percent had 20-40 staff, and only 0.9 percent had less than 20 staff. This shows that the majority of the hotels had a bigger number of staff members and this could be attributed to the fact that majority of the hotels were three star and above. Therefore, they had to employeee larger number of staff to manage all the operations in the hotel.

4.3.3 Hotel Membership

Table 4.5 below shows the membership of the hotels.

Table 4.5: Hotel Membership

Hotel Membership	Frequency	Percent
Uganda Hotel Owners Association	108	99.1
Others (Not Yet Registered with UHOA)	01	0.9
Total	109	100

Source: Field data, 2023

Results in Table 4.5 above revealed that 99.1 percent of them were members of the Uganda Hotel Owners Association, while 0.9 percent, which represented one hotel, was a new hotel and had not registered with the Uganda Hotel Owners Association. Therefore, findings showed almost all the hotels were members of the Uganda Hotel Owners Association. This association brings together hotel actors who can share experiences and knowledge and thereby enrich themselves in the way they conduct business and the way they can support each other so that there are mutual benefits.

4.4 Descriptive Statistics Based on the Study Variables

The descriptive statistics were presented with regard to the study variables. The findings were presented in the order of management agility, complexity adaptability, and business resilience.

4.4.1 Responses for management agility

The descriptive statistics in this section present the responses regarding management agility. All participants were requested to rank their responses using a Likert scale, and the findings were subsequently analysed using means and standard deviations for interpretation. The extracted mean was compared to the grand mean to ascertain the level of agreement or disagreement with the statement.

Table 4.6: Responses for management agility

Management Agility	Min	Max	Mean	SD
Flexibility				
We always make swift adjustments to meet changing demands of this hotel	2	5	3.87	0.79
We swiftly respond to customers' feedback or any changing expectations as requested	2	5	4.08	0.76
We always foster a culture of creativity that constantly seeks new ways to enhance our customers' experiences	2	5	4.11	0.73
We have contingency plans to respond to any crisis that may arise from our operations	2	5	4.06	0.74
Grand Mean and SD			4.03	0.76
Rapid decision-making				
We offer a range of services to adapt to our customers' preferences	2	5	4.11	0.78
We always make quick informed decisions in response to unexpected situations	1	5	4.00	0.83
We have efficient communication channels enabling timely information sharing across all our hotel departments	1	5	4.01	0.78
Our Staff are empowered with the necessary resources to make decisions independently	2	5	4.07	0.78
Our hotel management delegates decision-making powers to competent employees enabling quick decision-making at different levels	2	5	4.07	0.74
Our hotel management promotes a culture of decentralized decision-making to make decisions in a timely manner	2	5	4.09	0.76
Grand Mean and SD			4.06	0.78
Strategic thinking				
We prioritise addressing any current and future customer needs	2	5	4.03	0.77
We have a culture of continuous learning to adapt to evolving market trends of our customer expectations	2	5	4.07	0.77
We regularly change the marketing strategies to meet the changing customer needs	2	5	4.01	0.72
We always collaborate with our external partners	2	5	3.92	0.86
In this hotel We use hotel integrated technology to enhance business operations	2	5	3.91	0.85
Grand Mean and SD			3.99	0.79

Source: Field data, 2023

From Table 4.6 above, flexibility of the management of the hotel, it was regarded as essential since it scored a grand mean of (4.03) and a standard deviation equivalent (0.76) and the most significant was that hotel manages always foster a culture of creativity that constantly seeks new ways to enhance the customers' experiences. Rapid decision-making was also regarded as essential with the high grand mean of (4.06) and a standard deviation equivalent (0.78) and the most significant factor was taking a decision of offering a range of services to adapt to different customers' preferences. Strategic thinking was also essential since it scored a grand mean of

(3.99) and a standard deviation equivalent or below (0.79) and the most essential item was the culture of continuous learning to adapt to evolving market trends of customer expectations.

4.4.2 Responses for complexity adaptability

The findings were analysed in the form of means, and standard deviations for interpretation. The means were compared to the grand mean to determine the level of agreement or disagreement towards the statement.

Table 4.7: Responses for complexity adaptability

Complexity Adaptability	Min	Max	Mean	SD
Versatility				
We have a flexible organizational structure that allows effective coordination across all our hotel departments	2	5	3.97	0.78
We prioritise learning to acquire knowledge needed to navigate through complex situations	2	5	4.14	0.68
We closely monitor our customers' feedback so we can offer better services	2	5	3.93	0.83
We have a team that monitors market trends in order for the hotel to adjust with changing market needs	2	5	4.03	0.81
Our hotel management empowers teams to adapt to complex situations to drive continuous improvement	2	5	4.09	0.80
Grand Mean and SD			4.03	0.78
Diversity				
Our hotel management fosters knowledge sharing among different departments and teams	2	5	3.90	0.83
Our hotel management builds strategic alliances with external institutions to address complex challenges whenever encountered	2	5	4.01	0.70
Our hotel management has a proactive approach to risk management	2	5	3.95	0.73
Our hotel management commits to inclusive recruitment to attract people of different backgrounds like culture	2	5	4.13	0.75
Our hotel management provides training and development programs that promote diversity awareness of our employees.	3	5	4.19	0.74
Grand Mean and SD			4.04	0.75
Innovativeness				
We have scalable system which handles increasing complexity of our customer demands without sacrificing service quality	2	5	3.97	0.79
Our hotel effectively integrates technology in all operations to streamline processes as a way of enhancing customer experience	2	5	3.95	0.82
Our hotel management invests in research to continuously improve on our services	1	5	4.03	0.80
Our hotel Implements feedback systems to gather customer insights for continuous service improvement	2	5	4.02	0.80
Grand Mean and SD			3.99	0.80

Source: Field data, 2023

Results in Table 4.7 above show, adaptability in hotels as an essential element with a grand mean of (4.03) and a standard deviation equivalent of (0.78) and the most significant item was that hotels prioritised learning to acquire knowledge needed to navigate through complex situations. Diversity in the hotels was also found to be essential having scored grand mean of (4.04) and a standard deviation equivalent (0.75) and the most significant point was the that hotel management provides training and development programs that promote diversity awareness of the employees. On the issue of innovativeness, it was also significant having scored a grand mean of (3.99) and a standard deviation equivalent (0.80) and the most essential item was hotel managements had invested in research to continuously improve on services.

4.4.3 Responses for business resilience

The findings were analysed in form the of means, and standard deviations for interpretation where the mean values were compared to the grand mean to ascertain the level of agreement or disagreement towards the statements presented to respondents.

Table 4.8: Responses for business resilience

<i>Business Resilience</i>	<i>Min</i>	<i>Max</i>	<i>Mean</i>	<i>SD</i>
<i>Financial stability</i>				
We have diverse stable revenue streams for this hotel	2	5	4.05	0.76
Our hotel has continuously generated profits which demonstrate business continuity	2	5	4.12	0.75
Our hotel management has access to funding options during challenging times	2	5	4.05	0.79
Our hotel meets all its financial obligations whenever they fall due	1	5	3.95	0.86
We have suppliers who always supply the hotel with all products even if the hotel is facing financial challenges	2	5	4.07	0.73
Our customers continue to increase every year which contributes to increased earnings	2	5	4.05	0.81
<i>Grand Mean and SD</i>			4.05	0.78
<i>Self-situation awareness</i>				
Our hotel brand performs well in the market	1	5	4.03	0.78
We regularly conduct competitor analysis to understand the current market trends	1	5	4.09	0.77
Our hotel management regularly conducts market research to identify opportunities	1	5	4.14	0.77
<i>Grand Mean and SD</i>			4.09	0.77
<i>Leveraging knowledge</i>				
Our hotel management established partnerships with external organizations to leverage their expertise that is useful to this hotel's operations	2	5	4.13	0.77
Our hotel management cultivates a culture of continuous learning on trendy hotel operations	1	5	3.92	0.80
Our hotel management cultivates a culture of knowledge sharing among employees	1	5	4.12	0.71
Our hotel implemented robust knowledge management system for employees to easily access valuable knowledge	2	5	4.20	0.74
<i>Grand Mean and SD</i>			4.09	0.76
<i>Proactive posture</i>				
We have the capacity to address any type of operational disruption whenever encountered	2	5	3.99	0.87
We always conduct regular risk assessments to identify potential risks that may affect our hotel operations	3	5	3.99	0.80
We always conduct scenario planning exercises to come up with contingency plans	2	5	4.14	0.76
Our Management established proactive communication channel to reach our clients	2	5	4.17	0.70
<i>Grand Mean and SD</i>			4.07	0.78

Source: Field data, 2023

From Table 4.8 above, financial stability as a form of business resilience was essential having scored a grand mean of (4.05) and a standard deviation equivalent (0.78) and the most

significant item was that the hotels had continuously generated profits which demonstrate business continuity. The issue of self-situation awareness was also essential with grand mean of (4.09) and standard deviation equivalent (0.77) and the most significant item was that hotel management regularly conducted market research to identify opportunities. Regarding the leveraging knowledge, it scored a grand mean of (4.0) and standard deviation equivalent (0.76) making it essential and the most significant item was the hotel implemented robust knowledge management system for employees which easily access valuable knowledge. Lastly, proactive posture was essential since it scored grade mean of (4.07) and a standard deviation equivalent or below (0.78) and the most significant item was that the hotel management established a proactive communication channel to reach all the clients.

4.5 Factor analysis

The researcher ran the factor analysis to uncover underlying patterns, relationships, and dimensions within a dataset to in dimensionality reduction and enhancing the interpretability and validity of research findings. By identifying latent variables and simplifying complex data structures, factor analysis facilitates more focused and informed decision-making processes.

4.5.1 Management ability

The information in the table 4.9 shows the factor analysis results for management ability.

Table 4.9 Factor analysis for management ability

<i>Items</i>	<i>Flexibility</i>	<i>Rapid decision- making</i>	<i>Strategic thinking</i>
We always make swift adjustments to meet changing demands of this hotel	.715		
We swiftly respond to customers' feedback or any changing expectations as requested	.590		
We always foster a culture of creativity that constantly seeks new ways to enhance our customers' experiences	.717		
We have contingency plans to respond to any crisis that may arise from our operations	.607		
We offer a range of services to adapt to our customers' preferences		.662	
We always make quick informed decisions in response to unexpected situations		.675	
We have efficient communication channels enabling timely information sharing across all our hotel departments		.551	
Our Staff are empowered with the necessary resources to make decisions independently		.650	
Our hotel management delegates decision-making powers to competent employees enabling quick decision-making at different levels		.682	
Our hotel management promotes a culture of decentralized decision-making to make decisions in a timely manner		.699	
We prioritise addressing any current and future customer needs			.560
We have a culture of continuous learning to adapt to evolving market trends of our customer expectations			
We regularly change the marketing strategies to meet the changing customer needs			.551
We always collaborate with our external partners			.704
In this hotel We use hotel integrated technology to enhance business operations			.718
Eigen Values	1.7	1.8	1.8
Variance (%)	43.6	29.4	35.6

Table 4.9 above shows results management agility was measured using the constructs of flexibility, rapid decision-making and strategic thinking. Flexibility, the most dominant item accounted for (.717) and the variance in the data was explained by each factor was 43.6 percent which showed that there was relatively low portion of variability in the data. Furthermore, the Eigenvalue results were (1.7) which was higher than one showed that the corresponding factors were also important.

The construct of rapid decision-making indicated that the most dominant item accounted for (.718) and the variance in the data was explained by each factor was 35.6 percent which showed that there was relatively low portion of variability in the data. With an Eigenvalue of (1.8) higher than one, the results indicate that the other corresponding factors remain significant for further study.

The construct of strategic thinking showed that most dominant item accounted for (.699) and the variance in the data was explained by each factor was 29.4 percent which showed that there was relatively low portion of variability in the data. Furthermore, the Eigenvalue results were (1.8) which was higher than one showed that the other corresponding factors were still important to study.

4.5.2 Complexity adaptability

The results in the table 4.10 shows the factor analysis results for complexity adaptability

Table 4.10: Factor analysis for complexity adaptability

<i>Items</i>	<i>Versatility</i>	<i>Diversity</i>	<i>Innovativeness</i>
We have a flexible organizational structure that allows effective coordination across all our hotel departments	.606		
We prioritise learning to acquire knowledge needed to navigate through complex situations	.776		
We closely monitor our customers' feedback so we can offer better services	.674		
We have a team that monitors market trends in order for the hotel to adjust with changing market needs			
Our hotel management empowers teams to adapt to complex situations to drive continuous improvement	.736		
Our hotel management fosters knowledge sharing among different departments and teams		.547	
Our hotel management builds strategic alliances with external institutions to address complex challenges whenever encountered		.616	
Our hotel management has a proactive approach to risk management		.634	
Our hotel management commits to inclusive recruitment to attract people of different backgrounds like culture		.662	
Our hotel management provides training and development programs that promote diversity awareness of our employees.		.619	
We have scalable system which handles increasing complexity of our customer demands without sacrificing service quality			
Our hotel effectively integrates technology in all operations to streamline processes as a way of enhancing customer experience			.737
Our hotel management invests in research to continuously improve on our services			.677
Our hotel Implements feedback systems to gather customer insights for continuous service improvement			.705
Eigen Values	1.7	1.9	1.7
Variance (%)	34.6	38.0	43.6

Table 4.10 above shows that complexity adaptability was measured using the three constructs of adaptability, diversity and innovativeness. The construct of adaptability showed that the most prominent item contributed to a loading of (.776), while each factor explained 34.6 percent of the variance in the data, indicating a relatively low level of variability. Additionally, with Eigenvalues of (1.7), higher than one, the results highlighted the significance of the corresponding factors.

In regards to the diversity construct, the leading item accounted for a loading of (.662), and each factor explained 38.0 percent of the variance in the data, suggesting a relatively low level of variability. With an Eigenvalue of (1.9), exceeding one, these findings suggest that the other corresponding factors retain significance in the study.

Finally, innovativeness, the predominant factor accounted for loading of (.737) and explained 43.6 percent of the variance in the data, indicating a relatively low level of variability. Additionally, the Eigenvalue results (1.7), higher than one, indicate the significance of the other corresponding factors in the study.

4.5.3 Business resilience

The results in the table 4.11 shows the factor analysis results for business resilience

Table 4.11: Factor analysis for business resilience

<i>Items</i>	<i>Financial stability</i>	<i>Self-situation awareness</i>	<i>Leveraging knowledge</i>	<i>Proactive posture</i>
We have diverse stable revenue streams for this hotel	.585			
Our hotel has continuously generated profits which demonstrate business continuity	.609			
Our hotel management has access to funding options during challenging times	.511			
Our hotel meets all its financial obligations whenever they fall due	.638			
We have suppliers who always supply the hotel with all products even if the hotel is facing financial challenges				
Our customers continue to increase every year which contributes to increased earnings	.572			
Our hotel brand performs well in the market		.672		
We regularly conduct competitor analysis to understand the current market trends		.713		
Our hotel management regularly conducts market research to identify opportunities		.584		
Our hotel management established partnerships with external organizations to leverage their expertise that is useful to this hotel's operations				
Our hotel management cultivates a culture of continuous learning on trendy hotel operations			.573	
Our hotel management cultivates a culture of knowledge sharing among employees			.550	
Our hotel implemented robust knowledge management system for employees to easily access valuable knowledge			.529	
We have the capacity to address any type of operational disruption whenever encountered				.525
We always conduct regular risk assessments to identify potential risks that may affect our hotel operations				.643
We always conduct scenario planning exercises to come up with contingency plans				.643
Our Management established proactive communication channel to reach our clients				.651
Eigen Values	1.7	1.3	1.7	1.5
Variance (%)	43.6	43.4	39.3	38.1

From Table 4.11 above, business resilience was measured using four constructs of financial stability, self-situation awareness, leveraging knowledge and proactive posture. First financial

stability, the leading item showed a loading of (.638), with each factor accounting for 43.6 percent of the data's variance, suggesting a relatively low degree of variability. Moreover, the Eigenvalues (1.7), surpassing one, emphasized the importance of the corresponding factors.

In terms of self-situation awareness, the predominant factor showed a loading of (.713) and accounted for 43.4 percent of the variance in the data, suggesting a moderately low level of variance. The Eigenvalue of (1.3), above one, implies that the other corresponding factors remain relevant in the study.

The construct of leveraging knowledge indicated that the dominant factor displayed a loading of (.573) and explained 39.3 percent of the variance in the data, indicating a moderate level of consistency. Moreover, the Eigenvalue results (1.7), exceeding one, highlighted the importance of the other related factors in the study.

Finally, proactive posture, the leading predominant factor demonstrated a loading of (.651) and explained 38.1 percent of the variance in the data, suggesting a relatively low level of variance. Furthermore, the Eigenvalue results (1.5) above one highlighted the significance of the other corresponding factors in the study.

4.6 Reliability of the study variables

Table 4.12: Reliability test of tools

Table 4.12: below show the reliability of the study variables.

Construct	Item tested	Alpha values
Management Agility	15	.774
Complexity Adaptability	14	.740
Business resilience	17	.754

The data was entered into SPSS Ver. 23, and tested for their reliability based on the Cronbach reliability test scores (alpha values). The study variables were considered reliable because Alpha Values above 0.7 as recommended (Mugenda & Mugenda, 2013).

4.7 Correlation analysis

Pearson correlation was run using SPSS Ver. 23 and was used to investigate the relationship between the relationship between management agility, complexity adaptability and business resilience among hotels in Kampala Metropolitan were presented in the Table 4.13 below.

Table 4.13: Correlation results on relationship between variables

Items	Mean	S.Dev	MA	CA	BR
Management Agility (MA)	4.028	.381	1		
Complexity Adaptability (CA)	4.023	.371	.737**	1	
Business Resilience (BR)	4.073	.348	.656**	.665**	1

** Correlation is significant at the .01 level (2-tailed).

The correlation results in Table 4.13 above revealed that management agility had a significant and positive relationship with business resilience at ($r = .656^{**}$, $P < 0.01$). Furthermore, complexity adaptability was also significantly and positively related with business resilience at ($.665^{**}$, $P < 0.01$). This was a relationship between management agility and complexity adaptability at ($r = .737^{**}$, $P < 0.01$). This meant that any positive adjustment in management agility and complexity adaptability will lead to increase to business resilience.

4.8 Regression analysis

This study employed a regression analysis to evaluate the predictability levels of management agility and complexity adaptability on business resilience.

4.8.1 The predictability level of management agility on business resilience

A linear regression analysis was conducted, and the results are presented in Table 4.14 below.

Table 4.14: The predictability level of management agility on business resilience

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	1.336	.167		8.018	.000
Management Agility	.679	.041	.744	16.494	.000
Model Summary					
R Square	.553				
Adjusted R Square	.551				
ANOVA (F-Statistics)	272.065, P=.000 < 0.05				
Dependent Variable: Business Resilience					

From Table 4.14, it was revealed that management agility positively predicted Business Resilience by 55.1 percent (Adjusted R square =0.551). It also showed a goodness of fit ($F=272.065$, $p < 0.05$). The model further indicated B-value = 0.679 which showed that management agility had a statistically positive contribution on business resilience. Therefore, a unit increase in management agility will lead to with 0.679 increase in business resilience. Similarly, a unit decrease in management agility leads to 0.679 decrease in business residence.

4.8.2 The predictability level of complexity adaptability on business resilience

A linear regression was used and results are presented in Table 4.15 as presented below.

Table 4.15: The predictability level of complexity adaptability on business resilience

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	1.246	.169		7.385	.000
Complexity Adaptability	.703	.042	.750	16.822	.000
Model Summary					
R Square	.563				
Adjusted R Square	.561				
ANOVA (F-Statistics)	282.975, P=.000 < 0.05				
Dependent Variable: Business Resilience					

From Table 4.15, it was revealed that complexity adaptability positively predicted business resilience by 56.1 percent (Adjusted R square =0.561). It also showed a goodness of fit ($F=282.975$, $p < 0.05$). The model further indicated B-value = 0.703 which showed that complexity adaptability had a statistically positive contribution on business resilience. Therefore, a unit increase in complexity adaptability will lead to with 0.703 increase in business resilience and a unit decrease in complexity adaptability leads to 0.703 decrease in business resilience.

4.8.3 The predictability level of management agility on complexity adaptability

A linear regression was used and results are presented in Table 4.16 as presented below.

Table 4.16: The predictability level of management agility on complexity adaptability

	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	.877	.159		5.502	.000
Management Agility	.781	.039	.801	19.833	.000
Model Summary					
R Square	.641				
Adjusted R Square	.640				
ANOVA (F-Statistics)	393.339, P=.000 < 0.05				
Dependent Variable: Complexity adaptability					

From Table 4.15, it was revealed that management agility positively predicted complexity adaptability by 64.0 percent (Adjusted R square =0.640). It also showed a goodness of fit ($F=393.339$, $p < 0.05$). The model further indicated B-value = 0.781 which showed that management agility had a statistically positive contribution on complexity adaptability. Therefore, a unit increase in management agility will lead to with 0.781 increase in complexity adaptability. Similarly, a unit decrease in management agility leads to 0.781 decrease in complexity adaptability.

4.8.4 The combined predictability level of demographic characteristics of respondents, management agility and complexity adaptability on business resilience

To determine the combined predictability level, a multiple regression was used. The results of a multiple regression were presented in Table 4.17 below.

Table 4.17: The combined predictability level of demographic characteristics of respondents, management agility and complexity adaptability on business resilience

Variables	Model 1			Model 2		
	B	S.E	β	B	S.E	β
Sex	.054	.040	.077	.004	.029	.005
Marital Status	.090*	.044	.129*	.047	.031	.067
Age of respondent	-.029	.025	-.080	.005	.018	.013
Highest level of education	.152**	.025	.373**	.027	.020	.065
Tenure with Hotel	.002	.022	.007	-.001	.015	-.003
Hotel Location	-.121**	.030	-.237**	-.042	.022	-.083
Age of the Hotel	.126**	.031	.310**	.078**	.023	.192**
Category of Hotel	.014	.032	.030	-.024	.023	-.054
Number of Staff in the hotel	-.072	.047	-.109	-.063	.034	-.096
Hotel membership	-.879**	.300	-.170**	-.544*	.215	-.105*
Management Agility				.312**	.065	.342**
Complexity Adaptability				.372**	.066	.397**
R ²	.324			.660		
▲ R ²	.292			.640		
ANOVA (F-Statistics)	F=10.098, P=.000 <0.05			F=33.793, P= .000 <0.05		
Note:						
a) ** P<.01, * P< .05						
b) B – Unstandardized coefficients						
c) β - Standardized coefficients						
d) S.E – Standard Error						

From the results, Model 1 involved regressing respondent's demographic characteristics which included sex, marital status, age of respondent, highest level of education, tenure with hotel, hotel location, age of the hotel, category of hotel, number of staff in the hotel and hotel membership. The results revealed that respondent's demographic characteristics such as marital status, highest level of education, hotel location, age of the hotel and hotel membership significantly predicated business resilience ($P < 0.05$, 0.01) while others were insignificant predictors of business resilience. Overall, the model positively predicated business resilience by 29.2 percent showed a goodness fit (Adjusted R Squared = .292, F F=10.098, $P<.005$). From

Model 2 involved the addition of management agility and complexity adaptability. Both management agility and complexity adaptability positive and significant at ($P < 0.01$). The model made a positively and significantly predicated business resilience by 64.0 percent and showed a goodness fit (Adjusted R Squared = 0.640, $F = 33.793$, $P < 0.05$). The remaining 36.0 percent was due to other factors not considered in this study.

4.9 The mediating role of complexity adaptability on the relationship between management agility and business resilience in hotels

The researcher ran a mediation analysis to assess the effect of management agility on business resilience through complexity adaptability. For testing mediation to be successful, there are steps that have to be considered as put forward by Baron and Kenny (1986) and these include;

- i) Establishing a relationship between the independent variable (IV) and the dependent variable (DV)
- ii) Establishing a relationship between the independent variable (IV) and the mediator (M)
- iii) Establishing a relationship between the mediator (M) and the dependent variable (ID)
- iv) Assess the effect of the mediator (M) on the relationship between the independent variable (IV) and the dependent variable (DV)

Table 4.18: Results for mediation effect from Sobel, Aroian and Goodman Tests

Input		Test Statistics		Std. Error	p-Value
A	0.781	Sobel Test	12.84275767	0.04275118	0.000
B	0.703	Aroian Test	12.83334133	0.04278254	0.000
S _a	0.039	Goodman Test	12.85219477	0.04271979	0.000
S _b	0.042				

The results in Table 4.18 above, Sobel Test showed Z value = 12.84275767 with Std Error = 0.04275118 with significant value of ($p\text{-value} = 0.000 < 0.05$). Then Aroian Test showed Z value = 12.83334133 with Std Error = 0.04278254 with significant value of ($p\text{-value} = 0.000 < 0.05$) and Goodman Test showed Z value = 12.85219477 with Std Error = 0.04271979 with

significant value of ($p\text{-value} = 0.000 < 0.05$). The tests scored positive and significant Z-values which meant all these three test of (Sobel, Aroian and Goodman tests) indicated that introduction of complexity adaptability in the equation as a mediator significantly mediates the relationship between management agility business resilience in hotels in Kampala Metropolitan.

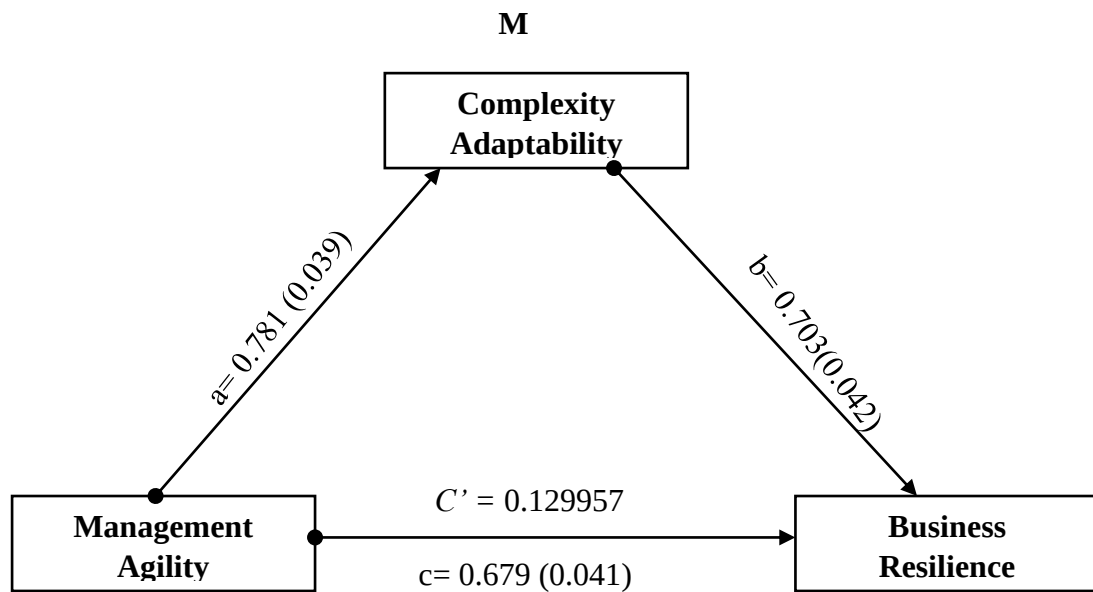


Figure 6: The mediating role of complexity adaptability on the relationship between management agility and business resilience in hotels in Kampala Metropolitan

Given that after introducing in complexity adaptability as a mediator, the direct effect remained significant at $C' = 0.129957$ which showed that complexity adaptability *partially mediated* the relationship between management agility and business resilience

CHAPTER FIVE

DISCUSSION OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The chapter presents a discussion of the study findings, conclusions, and recommendations. The presentation was organised in line with study objectives, which included examining the relationship between management agility and business resilience in hotels, assessing the relationship between management agility and complexity adaptability in hotels in Kampala Metropolitan, the relationship between complexity adaptability and business resilience in hotels, and investigating the mediating role of complexity adaptability on the relationship between management agility and business resilience in hotels.

5.2 Discussion of the study findings

5.2.1 Management agility and business resilience

There is a positive and significant relationship between management agility and business resilience in hotels in Uganda. Additionally, the results revealed that management agility positively predicated business resilience. This happens when the hotel management is flexible by always fostering a culture of creativity, making swift adjustments to meet changing demands of the hotel, having contingency plans to respond to any crisis that may arise from the business operations, and swiftly responding to customers' feedback or any changing expectations as requested. This in turn makes the hotel have diverse stable revenue streams as it continuously generates and increases its earnings every year, giving it access to funding options during challenging times.

Additionally, hotels can create a rapid decision-making environment by having efficient communication channels for timely information sharing across all hotel departments, empowering staff with the necessary resources to make decisions independently, delegating decision-making powers to competent employees to enable quick decision-making at different levels, promoting a culture of decentralised decision-making to make decisions in a timely manner, making quick informed decisions in response to unexpected situations, and offering a range of services to adapt to their customers' preferences. This makes the hotel brand perform well in the market as their customers continue to increase every year, which contributes to increased earnings.

Furthermore, the hotel's strategic thinking includes collaborating with external partners and integrating technology to enhance business operations, regularly changing marketing strategies, and having a culture of continuous learning to adapt to evolving market trends while prioritising addressing any current and future customer needs. This enables hotel management to have a robust knowledge management system for employees to easily access valuable knowledge and the capacity to address any operational disruption whenever encountered. These findings were in line with findings from the study by Adun, Ojo, and Adeniji (2020), who found that hotels that were able to quickly respond to customer needs and preferences were more likely to build customer loyalty and satisfaction, which in turn enhanced their resilience to competition and economic downturns.

5.2.2 Management agility and complexity adaptability

Results showed a positive and significant relationship between management agility and complexity adaptability in hotels. Furthermore, management agility also positively predicted complexity adaptability. This happens when the hotel management is flexible by always making swift adjustments to meet changing demands of the hotel, fostering a culture of

creativity that constantly seeks new ways to enhance our customers' experiences, having contingency plans to respond to any crisis that may arise from our operations, and swiftly responding to customers' feedback or any changing expectations as requested. This increases the complexity adaptability potential of hotels by closely monitoring the customers' feedback so they can offer better services, empowering teams to adapt to complex situations to drive continuous improvement, taking a proactive approach to risk management, and implementing feedback systems to gather customer insights for continuous service improvement.

Furthermore, the hotel management, with rapid decision-making, promotes a culture of decentralised decision-making to make decisions in a timely manner, empowers staff with the necessary resources to make decisions independently, delegate decision-making powers to competent employees, enabling quick decision-making at different levels, and has efficient communication channels that help employees always make quick informed decisions in response to unexpected situations. This promotes complexity adaptability in these hotels by empowering teams to adapt to complex situations to drive continuous improvement, having a flexible organisational structure that allows effective coordination across all the hotel departments, and developing a scalable system that handles the increasing complexity of customer demands without sacrificing service quality.

Additionally, strategic thinking in hotel management, by prioritising addressing any current and future customer needs, regularly changing marketing strategies to meet the changing customer needs, always collaborating with their external partners, and integrating technology to enhance business operations, promotes complexity adaptability by building strategic alliances with external institutions to address complex challenges whenever encountered, effectively integrating technology in all operations to streamline processes as a way of

enhancing the customer experience, and investing in research to continuously improve the services offered to customers.

These findings were in line with the previous findings of Kandampully, Zhang, and Jaakkola (2017) and Devie, Kwistianusn, and Wellyani (2023), which suggested that management agility in hotels is positively associated with complexity adaptability, leading to an enhanced customer experience and increased loyalty. Management agility improves operational efficiency and cost optimization. This means agile hotel management teams demonstrate the ability to streamline processes, allocate resources effectively, and adapt quickly to evolving operational challenges.

5.2.3 Complexity adaptability and business resilience

There is a positive and significant relationship between complexity adaptability, and business resilience in hotels. Furthermore, complexity adaptability positively predicted business resilience. This happens when hotel management is adaptable by having a flexible organisational structure that allows effective coordination across all our hotel departments, prioritising learning to acquire the knowledge needed to navigate through complex situations, closely monitoring the customers' feedback to offer better services, and empowering teams to adapt to complex situations to drive continuous improvement. This empowers the hotel management to conduct regular risk assessments to identify potential risks that may affect hotel operations, carry out scenario planning exercises to come up with contingency plans, and establish partnerships with external organisations to leverage their expertise that is useful to the hotel's operations.

Furthermore, the hotel management exhibits diversity by building strategic alliances with external institutions to address complex challenges whenever encountered, being committed to inclusive recruitment to attract people of different backgrounds, and providing training and development programmes that promote diversity awareness among employees. This increases the leverage of knowledge through cultivating a culture of continuous learning about trendy hotel operations and a culture of knowledge sharing among employees. Finally, hotel management is innovative by integrating technology into all operations to streamline processes as a way of enhancing the customer experience and investing in research to continuously improve services. This makes the hotels proactive in developing capacity to address any type of operational disruption whenever encountered and also in developing contingency plans to respond to any disruption in the business. The study results were in agreement with Namugenyi and Mwesige (2021), who revealed that hotels need to foster a culture of innovation, invest in technology, and train employees to be proactive in changing circumstances.

5.2.3 Complexity adaptability mediates the effect of management agility on business resilience.

Management agility and business resilience in hotels in Uganda showed a positive and significant relationship. This occurs when the hotel administration prioritises flexibility, fostering a culture that encourages creativity, swiftly adapting to evolving demands, and maintaining contingency measures to address any potential crises arising from business operations. Consequently, the hotel cultivates diverse and stable revenue streams, consistently expanding its earnings each year, thereby ensuring access to various funding alternatives during periods of adversity.

Complexity adaptability plays a big role in the hotel industry as it encourages flexibility by having a flexible organisational structure, which allows effective coordination across all hotel departments. Diversity in hotels builds strategic alliances with external institutions that address complex challenges whenever they arise, and the hotel gets committed to having a proactive approach to risk management. Hotels become innovative by investing in research to continuously improve their services and effectively integrating technology into all operations, which enhances the customer experience.

The introduction of complexity adaptability to management agility and business resilience increases the relationship's significance. This is because as hotel management embraces adaptability, diversity, and innovativeness, it becomes more flexible in responding to hotel operations, making decisions very quickly, and becoming more strategic thinkers, which increases the hotels financial stability, self-situation awareness, leveraging knowledge, and being more proactive in responding to emerging challenges in the hotels. The study findings resonated with findings from previous scholars such as Odogui, Ameh, and Ogba (2020), who emphasised that complexity adaptability provides the necessary tools and capabilities for managers to respond to complex challenges, ultimately influencing business resilience. This reduces vulnerability and enhances the ability of hotel management to withstand and recover from adverse events. This suggests that by fostering complexity adaptability, hotels can enhance their resilience by better managing and responding to various complexities, such as cultural diversity and regulatory changes, ultimately improving their overall ability to adapt and thrive.

5.3 Conclusions

In this study, the researcher concludes that complexity adaptability is the major predictor of business resilience. Hotel being complexity adaptive with measures that monitor market trends to adjust with changing market needs, proactive approach to risk management, empowering teams to adapt to complex situations to drive continuous improvement, prioritising learning to acquire knowledge needed to navigate through complex situations, investing in research to continuously improve on services, and implementing feedback systems to gather customer insights for continuous service improvement significantly improves the hotels' resilience in business. This bolsters the hotel's ability to withstand and adapt to various challenges, ultimately ensuring sustained success and competitiveness in the dynamic business environment.

5.4 Recommendations

The following recommendations were made:

5.4.1 Methodological recommendations

While the study primarily relied on quantitative data gathered through surveys, incorporating qualitative methods such as interviews or focus groups can provide richer insights into participants' experiences and perspectives. Qualitative data can help elucidate nuances and explain contextual factors that may not be captured through standardised survey instruments alone. By triangulating quantitative findings with qualitative narratives, the study can enhance the depth and validity of its conclusions, thereby increasing the robustness of its generalizability.

5.4.2 Policy recommendations

The Ministry of Tourism, Wildlife, and Antiquities should collaborate with stakeholders in the stakeholders in the hospitality industry to develop training programmes aimed at enhancing the skills and capabilities of hotel staff in areas such as market trend analysis, risk management, team empowerment, and continuous learning. These programs should be designed to equip employees with the knowledge and tools necessary to navigate complex situations effectively and drive continuous improvement in service delivery in the hospitality industry.

The Ministry of Finance, Planning, and Economic Development should offer incentives to hotels that invest in research and development initiatives aimed at improving service quality and enhancing customer satisfaction. This can be achieved through tax incentives, grants, or subsidies for hotels that demonstrate a commitment to innovation and continuous improvement in their operations.

5.4.3 Managerial recommendations

The researcher recommends that hotel management continuously encourage a culture that embraces flexibility and empowers employees to make quick decisions and swiftly adjust to changing circumstances. By emphasising these qualities, it will enhance the hotel's ability to navigate uncertainties and disruptions, ultimately strengthening its resilience in the face of adversity.

For hotels to remain resilient, there is a need to promote adaptability through flexible operational processes and agile decision-making frameworks, embrace diversity to leverage a variety of perspectives and experiences, and foster innovativeness to stimulate creativity and problem-solving abilities. By integrating these elements into their organisational culture and practices, hotels can enhance their capacity to navigate complexities, anticipate challenges, and

effectively respond to dynamic market conditions, thereby improving their overall business resilience in the hospitality industry.

Lastly, to embrace complexity adaptability, hotel management ought to invest in continuous learning and development programmes to empower teams with the knowledge and skills needed to navigate complex environments effectively. By embracing complexity adaptability as a core principle and incorporating it into their strategic planning and operational processes, hotels can better position themselves to thrive in an increasingly dynamic and uncertain business landscape.

5.5 Areas for further research

The current study focused on the hotel industry; therefore, future studies can look at management agility, complexity adaptability, and business resilience in sectors such as the manufacturing sector and trading sector, among others.

Furthermore, the current was conducted in Kampala Metropolitan, which includes Kampala, Wakiso, and Mukono districts. Therefore, future studies can carry out similar studies on management agility, complexity adaptability, and business resilience, considering hotels in other areas like Mbarara City, Jinja City, or Mbale City, to help in the comparison of the results.

Lastly, future studies should also focus on the influence of economic factors and government policies on the business resilience of hotels.

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APPENDICES

Appendix I: Participants' consent Form

Dear respondent

I'm Nsiimaruhanja Joab, as part of the requirements for the award of a Master's in Business Administration at Kyambogo University. I am undertaking a study on the topic, "***The relationship between management agility, complexity adaptability and business resilience in hotels that operate in Kampala Metropolitan***". As one of the key stakeholders in this study, you are hereby requested to participate in the study. Please feel free to participate, its only for academic study. Your views will be used for this purpose, considered confidential and with utmost privacy.

Aspect of concern	Description
Type of study	This is an academic and non-profit or funded
Objectives	The study will explore: i) To examine the relationship between management agility and business resilience in hotels in Kampala Metropolitan. ii) To investigate the relationship between complexity adaptability and business resilience in hotels in Kampala Metropolitan. iii) To assess the mediating role of complexity adaptability between management agility and business resilience in hotels in Kampala Metropolitan.
Your roles and expectations	As a participant, you will be expected to provide truthful information. You will not be asked to pay or be paid for providing information
Your privacy, confidentiality	Your identity, personal details and information will be held private and confidential and will not be used anywhere against you.
Limitations in handling and providing data	Your participation will only remain in the field. You are under no other obligation for data management thereafter.
Withdrawal terms	You are free to withdraw your participation at any time of the study as long as you feel the study is not providing conducive atmosphere of your stay or under any other circumstance.

If you agree with above, please append your names, signature and day-time contact telephone for which you shall be contacted further to participate in the study.

Participants' Name.....

Signature.....

Mobile

Telephone:.....

Researcher's Name:

.....Signature.....

Mobile

Telephone:.....

Appendix II: Questionnaire

Dear Respondent,

I'm Joab Nsiimaruhanza, as part of the requirements for the award of a Master's in Business Administration at Kyambogo University. You are being contacted to participate in this study on the topic, "***The relationship between management agility, complexity adaptability and business resilience in hotels that operate in Kampala Metropolitan***". You have been selected because of your experience and expertise about the subject matter. Please fill or respond with in this questionnaire for the appropriate answers you consider right. Your responses will be treated with lot of confidentiality and used only for academic purposes.

Section A: Bio-data

Please put a tick mark (✓) in the option boxes provided or fill in the spaces provided.

1. Sex

i) Male ☐

ii) Female ☐

2. Marital Status

i) Married ☐

ii) Single ☐

3. Age of respondent

i) 18-27 ☐ ii) 28-37 ☐ iii) 38-47 ☐ iv) 48-57 ☐ v) 58 and Above ☐

4. Respondent's highest level of education

i) Certificate ☐ ii) Diploma ☐ iii) Bachelor's Degree ☐

iv) Master's Degree ☐ v) Others (please specify):

.....

5. For how many years have you been working with this Hotel?

i) Less than 1 ☐ ii) 1-3 ☐ iii) 4-6 ☐ iv) 7-9 ☐ iv) 10 and above ☐

6. Hotel Location

i) Kampala Capital City ☐ ii) Wakiso District ☐ iii) Mukono District ☐

7. Age of the Hotel

i) Less than 1 ☐ ii) 1-3 ☐ iii) 4-6 ☐ iv) 7-9 ☐ iv) 10 and above ☐

8. Category of Hotel

i) One star ☐ ii) two star ☐ iii) Three star ☐ iv) Four star ☐

9. Number of Staff

10. This Hotel is a member of,

i) Uganda Hotel Owners Association ☐ ii) Others ☐ (please specify):

.....

For questions in Section B, please respond to the statements given below basing on the ranking scale.

1: Strongly Disagree (SD), 2: Disagree (D), 3: Neutral (N), 4: Agree (A) 5: Strongly Agree (SA).

SECTION B: Management Agility

Code	Item	Scale				
		SD	D	N	A	SA
	Flexibility					
MA1	We always make swift adjustments to meet changing demands of this hotel					
MA2	We swiftly respond to customers' feedback or any changing expectations as requested					
MA3	We always foster a culture of creativity that constantly seeks new ways to enhance our customers' experiences					
MA4	We have contingency plans to respond to any crisis that may arise from our operations					
MA5	We offer a range of services to adapt to our customers					
	Rapid decision-making					
MA6	We always makes quick informed decisions in response to unexpected situations					
MA7	We have efficient communication channels enabling timely information sharing across all our hotel departments					
MA8	Our Staff are empowered with the necessary resources to make decisions independently					
MA9	Our hotel management delegates decision-making powers to competent employees enabling quick decision-making at different levels					
MA10	Our hotel management promotes a culture of decentralized decision-making to make decisions in a timely manner					
	Strategic thinking					
MA11	We prioritize anticipating customer needs					
MA12	We have a culture of continuous learning to adapt to evolving market trends of our customer expectations					
MA13	We regularly change the marketing strategies to meet the changing customer needs					
MA14	We always collaborate with our external partners					
MA15	In this hotel We use hotel integrated technology to enhance business operations					

For questions in Section C, please respond to the statements given below basing on the ranking scale.

1: Strongly Disagree (SD), 2: Disagree (D), 3: Neutral (N), 4: Agree (A) 5: Strongly Agree (SA).

SECTION C: Complexity Adaptability

Code	Item	Scale				
		SD	D	N	A	SA
	Versatility					
CA1	We have a flexible organizational structure that allows effective coordination across all our hotel departments					
CA2	We prioritize learning to acquire knowledge needed to navigate through complex situations					
CA3	We closely monitor our customers' feedback and preferences					
CA4	We have a team that monitors market trends in order for the hotel to adjust with changing market needs					
AC5	Our hotel management empowers teams to adapt to complex situations to drive continuous improvement					
	Diversity					
CA6	Our hotel management fosters knowledge sharing among different departments and teams					
CA7	Our hotel management builds strategic alliances with external institutions to address complex challenges whenever encountered					
CA8	Our hotel management has a proactive approach to risk management					
CA9	Our hotel management commits to inclusive recruitment to attract people of different backgrounds like culture					
CA10	Our hotel management provides training and development programs that promote diversity awareness of our employees.					
	Innovativeness					
CA11	We have scalable system which handles increasing complexity of our customer demands without sacrificing service quality					
CA12	Our hotel effectively integrates technology in all operations to streamline processes as a way of enhancing customer experience					
CA13	Our hotel Management invests in research to continuously improve on our services					
CA14	Our hotel Implements feedback systems to gather customer insights for continuous service improvement					

For questions in Section D, please respond to the statements given below basing on the ranking scale.

1: Strongly Disagree (SD), 2: Disagree (D), 3: Neutral (N), 4: Agree (A) 5: Strongly Agree (SA).

SECTION D: Business resilience

SECTION D: Business Resilience

Code	Item	Scale				
		SD	D	N	A	SA
	Financial stability					
BR1	We have diverse stable revenue streams for this hotel					
BR2	Our hotel has continuously generated profits which demonstrate business continuity					
BR3	Our hotel management has access to funding options during challenging times					
BR4	Our hotel meets all its financial obligation whenever they fall due					
BR5	We have suppliers who always supply the hotel with all products even if the hotel is facing financial challenges					
BR6	Our customers continue to increase every year which contributes to increased earnings					
	Self-situation awareness					
BR7	Our hotel brand performs well in the market					
BR8	We regularly conduct market research to identify opportunities					
BR9	We regularly conduct competitor analysis to understand the current market trends					
BR10	Our hotel management regularly conducts market research to identify opportunities					
	Leveraging knowledge					
BR11	Our hotel management established partnerships with external organizations to leverage their expertise that is useful to this hotel's operations					
BR12	Our hotel management cultivates a culture of continuous learning on trendy hotel operations					
BR13	Our hotel management cultivates a culture of knowledge sharing among employees					
BR14	Our hotel implemented robust knowledge management system for employees to easily access valuable knowledge					
	Proactive posture					
BR15	We have the capacity to address any type of operational disruption whenever encountered					
BR16	We always conduct regular risk assessments to identify potential risks that may affect our hotel operations					
BR17	We always conduct scenario planning exercises to come up with contingency plans					
BR18	Our Management established proactive communication channel to reach our clients					

END: THANKS

Appendix III: Table for determining sample size from a given population

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	1000000	384
<i>Note: N is Population Size; S is Sample Size</i>					<i>Source: Krejcie & Morgan, 1970</i>				

Krejcie, R. V. and Morgan D. W. (1970). Determining sample size for Research Activities: Educational and Psychological Measurement.