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**Corporate Entrepreneurship in Context:**  
**Insights from a State-owned Enterprise in a Developing Country**

By

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I declare that this dissertation entitled **“Corporate Entrepreneurship in Context: Insights from a State-owned Enterprise in a Developing Country”** is my original work and has not been submitted to any other institutions anywhere to award any degree or certificates. All sources of information, ideas and views used in this dissertation are duly acknowledged.

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## LIST OF ABBREVIATIONS

AFCAC:	African Civil Aviation Commission
AFRAA:	African Airlines Associations
AU:	African Union
CE:	Corporate Entrepreneurship
CEO:	Chief Executive Officer
CV:	Corporate Venturing
CVC:	Corporate Venture Capital
EB:	Entrepreneurial Behavior
ECV:	External Corporate Venturing
EO:	Entrepreneurial Opportunities
GDP:	Gross Domestic Product
HR:	Human Resources
HRM:	Human Resource Management
IAI:	Israel Aerospace Industries
IATA:	International Air Transport Association
ICAO:	International Civil Aviation Organization
ICV:	Internal Corporate Venturing
JV:	Joint venture
KPT:	Key Performance Indicators
MEX:	Mexico City Airport
MRO:	Maintenance, Repair and Overhaul
R&D:	Research & Development
SDGs:	Sustainable Development Goals
SOEs:	State-owned Enterprises
UN:	United Nations
USAID:	United States Agency for International Development
WFP:	World Food Program

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## ABSTRACT

*Corporate entrepreneurship (CE) is an essential concept in entrepreneurship research. Many scholars have shown CE theoretical and empirical implications for firms' survival, development, and growth. The primary aim of this dissertation is to explore how corporate entrepreneurship unfolds in state-owned enterprises in a developing country context. It deepens our understanding on how CE unfolds in state-owned enterprises through innovation outcomes and addresses the role of HRM practices to facilitate CE in existing organizations. The dissertation consists of three independent papers. The first paper discusses the current literature on CE and suggests a future research agenda for CE that elucidates the importance of contextualization. It uses a systematic literature review approach to analyze and discuss 214 articles published in top-tier journals from 1985 to 2023. The findings propose a contextualized input-process-output model of CE, highlighting how internal and external enablers support firms in effectively exploring and exploiting entrepreneurial opportunities for CE activities. The second paper investigates how CE unfolds in state-owned enterprises through innovation practices. The paper focuses on pursuit of CE in state-owned enterprises through innovation outcomes in a developing country context by exploring a single case study of Ethiopian Airlines. We conducted 22 interviews with senior directors, managers, and senior experts in business development, R&D innovation hubs and with senior officials in marketing and finance. The findings describe the input and process leading to two outcomes of innovation. The paper contributes by identifying and describing the influence of different contextual dimensions on the innovation output of corporate entrepreneurship. The third paper investigates the role of HRM practices for corporate entrepreneurship in state owned enterprises. The paper focuses on how these practices are adapted to foster an entrepreneurial culture within the organization, explored in the case of Ethiopian airlines. We conducted 18 interviews with HR managers, HR professionals, business development, R&D innovation hubs managers and experts. The paper contributes to the existing literature by analyzing the role of HRM practices for CE in the public sector of developing countries. Furthermore, this paper contributes by elucidating how different contextual factors are affecting HRM practices for implementation of CE in state owned enterprises.*

**Keywords:** *Corporate entrepreneurship, innovation, HRM practices, developing country, state- owned enterprises, context, case study*

## CHAPTER 1: GENERAL INTRODUCTION

### 1.1. Background and Justification

Corporate entrepreneurship (CE) has received academic attention since it rose as a field of research in the 1980's (Glinyanova et al., 2021). In recent decades, CE has emerged as a strategic approach that enable firms to develop sustainable competitive advantages and drive profitable growth (Hornsby et al., 2009; Kuratko et al., 1990). The business environment is volatile, unpredictable, and competitive, which required firms to operate beyond traditional operational frameworks (Kuratko et al., 2004). To cope with the rapidly changing environment, organizations need to be more entrepreneurial in their business processes and day-to-day operations. This turned researchers' attention to CE, for its ability to create entrepreneurial culture and enhance organizational performance (Castrogiovanni et al., 2011). The significant potential of CE to revitalize companies through innovation-driven initiatives has led to growing interest for how entrepreneurship can be nurtured within established organizations (Corbett et al., 2013).

For organizations competing with fast-paced and competitive environments, CE provides an adaptive mechanism that integrates flexibility with innovative capability (Lumpkin & Dess, 1996). CE is critical for the organization to utilize opportunities and develop and sustain competitiveness through introducing new products, services and processes (Hornsby et al., 2002). Firms enhance their innovation capabilities by implementing CE which drive profitability in a dynamic environment (Antoncic & Hisrich, 2004). Moreover, previous research has explored the nature and dimension of CE including its constructs, antecedents, and implications for firm performance and growth (Teng, 2007; Zahra et al., 2000; Zahra & Hayton, 2008). The contextual diversity and the pressing need for context-specific theories in management and entrepreneurship have led scholars to call for a deeper examination and understanding of these contextual dynamics (Bruton et al., 2022; Filatotchev et al., 2022). Additionally, Welter (2011) calls for the role of context in entrepreneurship research. This dissertation acknowledges and extends these calls for the importance of contexts in CE research. Understanding how CE operates across different contextual settings is essential for developing more inclusive and context-sensitive insights that can inform both theory and practice. Whereby, this dissertation highlights an essential theoretical and empirical gap concerning the varied contexts in which CE unfolds.

In recent years, there has been growing scholarly interest in the role of CE within public sector organizations. This increased attention arises from the need to address increasingly complex, competitive, and dynamic environments. Moreover, there is an increased interest in CE within public sector organizations to confront these challenges and foster innovation (Bartlett & Dibben, 2002; Kearney & Meynhardt, 2016). Extant research has also identified the relevance of CE in state-owned enterprises for their expectation to meet the needs of its citizens while managing resource constraints (Gil-López et al., 2022). In today's global economy, organizations operating in developing countries face increasing pressures such as technological advancements, market liberalization, and shifting consumer demands. This dynamic environment forces firms to adapt in order to remain competitive and sustainable, which necessitates continuous innovation and adaptability. In this context, organizations in developing countries are experiencing a rapidly changing environment and are pressured to innovate by introducing new products, services and processes (Wadho & Chaudhry, 2018). Prior research suggests that since the contextual conditions in developing countries are less supportive than those in advanced economies (González-Pernía et al., 2015), we need a deeper contextualized understanding of the links between corporate entrepreneurship and innovation.

Furthermore, CE empowers firms to respond proactively and with agility to rapid technological advancements, providing flexible and innovative solutions (Urban & Mgwanya, 2024). In implementing CE, HRM practices play a crucial role in enhancing an organization's capacity to adapt and succeed in a dynamic environment (Mızrak, 2023). HRM practices can cultivate a culture of innovation and creativity, fostering an entrepreneurial mindset within organizations (Mathushan & Kengatharan, 2022). However, context-specific HRM practices are essential for promoting CE within established organizations (Seeck & Diehl, 2017). Research highlights that effective HRM practices in recruitment, training, performance evaluation, and rewards are essential for enhancing employees' capabilities and motivation (Kim et al., 2021; Schmelter et al., 2010; Tang et al., 2015). Moreover, aligning HRM practices with a company's business strategy plays a crucial role in shaping organizational attitudes, behaviors, and cultural dynamics, thereby fostering and enhancing corporate entrepreneurship activities (Moustaghfir et al., 2020). Thus, investigating the role of HRM practices in fostering CE within state-owned enterprises also provides a rich contextual foundation to deepen insights and advance our understanding in this field.

## 1.2. Concise Literature Review

### *Review of CE*

Corporate entrepreneurship (CE) refers to the pursuit of entrepreneurial actions and initiatives in established organizations that transform the organization through strategic renewal processes or extend the organization's scope of operations into new domains (Guth & Ginsberg, 1990). Guth and Ginsberg (1990) identified two major types of phenomena in CE: new venture creation within established organizations and the transformation of ongoing organizations through strategic renewal. Zahra and Covin (1995) suggested that CE involves entrepreneurial initiatives that require organizational sanctions and resource allocation to drive innovation across products, processes, and organizational structures. According to Covin and Miles (1999), CE encompasses sustained regeneration, organizational rejuvenation, strategic renewal, and redefinition, whether in terms of products, processes, or organization. Moreover, Sharma and Chrisman (1999, p. 18) described CE as “the process whereby an individual or a group of individuals, in association with an existing organization, create a new organization or instigate renewal or innovation within that organization”.

CE has been recognized as a key factor contributing to firm success (Zahra, 1996). It is designed to revitalize a firm's business by changing its competitive profile (Sharma & Chrisman, 1999; Zahra, 1995). CE allows a firm to fully exploit its current competitive advantage while also exploring tomorrow's opportunities and developing competencies required to pursue them (Covin & Miles, 1999; Kuratko et al., 2005). CE are seen as ways to create new business for an existing organization through the development of new products and/or markets and through strategic renewal (Guth & Ginsberg, 1990; Sharma & Chrisman, 1999). Firms engaged in CE to increase profitability, develop future revenue streams, successfully enter new markets, or configure resources (Kuratko et al., 2005). Furthermore, CE is a strategic orientation involving the regeneration of products, processes, services, strategies or even whole organizations (Covin & Miles, 1999). It supports sustained competitive advantage through the continuous generation and exploitation of new sources of knowledge. Therefore, CE can have a significant impact upon organizational, financial and market performance (Zahra, 1996).

Upon the importance of CE, there has been significant research interest in the area showing the theoretical and empirical implications of CE on organizational performance. A large

body of research has identified different constructs, variables, and antecedents of CE to investigate its impact on organizational performance and found a positive relationship (Antoncic & Hisrich, 2001; Zahra, 1991; Zahra, 1993). Other studies have focused on the organizational architectures as well as the entrepreneurial vision of top management required to enhance CE (Hornsby et al., 2002; Hornsby et al., 2009; Ireland et al., 2009). Such research in this area has focused on the environmental and organizational factors that contributed to enhancing and facilitating CE activities. For instance, research has explored factors including structure, culture, resources, and reward system in promoting CE (e.g. Block & Ornati, 1987; Brazeal, 1993; Fayolle et al., 2010; Russell & Russell, 1992; Sykes, 1992). Some other studies have focused on external factors like intense competition, technological change, and governmental policy change in influencing the CE towards the performance of the firm (Chen et al., 2014; Doha & Pearce, 2004; Zahra, 1991; Zahra & Covin, 1995).

Moreover, innovativeness is a core element of CE, central to corporate venturing and strategic renewal, which entails the application of innovations through the creation of new businesses, organizational structures, products, services, and processes (Covin & Miles, 1999, Kearney et al., 2008). Firms with a strong entrepreneurial orientation often possess unique competencies and innovative outlooks (Hsu et al., 2014). Therefore, there is a need to explore a better understanding of the links between CE and innovation (Ben Arif & Hikkerova, 2021; Kuratko et al., 2015). Furthermore, innovation is vital in developing countries by which firms enable them to renovate activities, reconfigure resources, and change entrepreneurial attitudes crucial in unpredictable environments (Turro et al., 2016; Yiu & Lau, 2008). In such context, innovation often involves the adoption and possibly modification of products and technologies that might be developed elsewhere (Egbetokun et al., 2016).

CE enables firms to foster creativity and innovation through the identification and exploitation of new products and services (Phan et al., 2009). Besides, firms need to communicate their entrepreneurial visions, support entrepreneurial initiatives with adequate resources, and nurture entrepreneurial culture in the organization (Marques et al., 2022). Furthermore, Kuratko et al. (2014) explained that the firm's environment should be conducive to entrepreneurial behavior and innovation so that they can instigate and nurture CE strategy to sustain competitive advantage in the environment. Therefore, the implementation of CE requires a conducive working environment which enhances

innovation and collaboration among organizational members (Chebbi et al., 2020). In this regard, HRM practices provide a substantial role in creating positive motives to encourage firm's abilities and practices for promoting entrepreneurial initiatives. Increasingly, HRM practices are needed for firms to encourage employee innovation and creativity, enable them to identify and exploit opportunities to achieve organizational goals (Shehata et al., 2021).

### **1.3. Statement of the Problem**

Corporate entrepreneurship (CE) is significant to create new ventures, drive innovation, and enable strategic renewal within organizations (Sharma & Chrisman, 1999; Zahra et al., 1999). Previous research in CE is largely studied in private sector, while less is known about how it can be implemented effectively in state-owned enterprises (SOEs), especially in developing countries where political and economic instability, and institutional challenges such as physical infrastructures make it difficult to engage in entrepreneurial activities (Chan & Mustafa, 2021; Yiu & Lau, 2008). Furthermore, firms in developing countries face rapid institutional changes due to changes in economic climate and changes in levels of government involvement, ownership patterns, and enforcement of business laws (Urban, 2019). In this regard, such constraints create a gap in our understanding of how state-owned enterprises can foster CE to achieve innovation and growth.

Despite state-owned enterprises playing a central role in many developing economies (Meissner et al., 2019), understanding how ownership influences CE in this context is crucial. In this regard, CE is key for prosperous development but faced extra challenges under state ownership due to bureaucracy and politics, scarcity of resources and infrastructure (Egbetokun et al., 2016). While extensive research has explored CE in developed economies, its dynamics and impact remain less explored in developing country contexts. However, the mechanisms underpinning entrepreneurial behavior in the Global South shaped by distinct institutional, socio-economic, and political landscapes (Bruton et al., 2022; Buratti et al., 2022). Moreover, developing countries often encounter more challenging conditions to foster innovation and entrepreneurial activities in existing organizations (Chan & Mustafa, 2021; González-Pernía et al., 2015; Yiu & Lau, 2008), which further requires the need for a contextualized understanding of CE in these settings. This dissertation reveals how the role of context in CE remains the major gap in literature

and addresses how contextual dimensions (business, spatial, social, institutional, organizational, and ownership context) affect CE under such conditions.

Furthermore, while HRM practices are important for fostering CE in existing organizations (Seeck & Diehl, 2017), less is known on how these practices function within the context of state-owned enterprises. This is particularly in developing countries, where state-owned enterprises face resource constraints, less supportive institutional frameworks, and heightened pressure to meet public demands while maintaining efficiency (Chang et al., 2019; Iliashenko et al., 2023; Kearney et al., 2008). Therefore, understanding the role of context specific HRM practices for CE within the public sector of a developing country remains unexplored and substantiate further investigations.

Moreover, CE remains an emergent and underexplored area in the public sector organizations within the Ethiopian context. Consequently, CE as a strategic framework within the public sector has yet to receive substantive academic attention, leaving a notable gap in literature especially in Ethiopia. The availability of little studies on CE in Ethiopian public sectors organizations warrants a critical need for further investigation, providing an opportunity to contribute new insights and expand the understanding of CE in a rapidly evolving business environment. This dissertation, therefore, investigates the broader global literature and addresses the role of context in CE research. Furthermore, it examines how Ethiopian airlines favor from the pursuit of CE through innovation outcomes and investigates the role of HRM practices to facilitate CE, highlighting the benefits and adaptability of these practices within the unique challenges of a state-owned enterprise in a developing country context.

#### **1.4. Research Questions**

The overall research question is how CE unfolds in state owned enterprises in a developing country context?

Specifically, this dissertation answers the following basic research questions

- What is the current literature of CE and how to contextualize CE and the way forward?
- How does corporate entrepreneurship unfold in public sector organizations through innovation practices in a developing country context?

- How does HRM practices affect CE in the public sector of a developing country context?

## **1.5. Objectives of the Study**

### **1.5.1. General objective**

The general aim of this dissertation is to explore corporate entrepreneurship unfolds in state-owned enterprises in a developing country context. It deepens our understanding on how CE unfolds in state-owned enterprises through innovation outcomes and addresses the role of HRM practices to facilitate CE in existing organizations.

### **1.5.2. Specific objectives**

Specifically, the study aims the following specific objectives for each paper included in this dissertation.

The first paper investigates the available previous literatures and explores the contextualization of CE across business, spatial, social, institutional, organizational, and ownership context dimensions. Specifically, the study

- discuss the current literature on CE and suggest a future research agenda for CE that elucidates the importance of contextualization.

The second paper investigates how CE unfolds in state-owned enterprises through innovation practices in a developing country context through the case of Ethiopian airlines. The paper focuses on the pursuit of CE in state-owned enterprises through innovation outcomes. Specifically, the study

- explore how CE unfolds in the public sector through innovation practice in a developing country context

The third paper examines the role of HRM practices for CE in state owned enterprises in the case of Ethiopian airlines. The paper focuses on how these practices are adapted to foster an entrepreneurial culture within the organization. Specifically, the study

- investigate the role of HRM practices for CE in state owned enterprises of a developing country context.

## **1.6. Significance of the study**

This dissertation primarily focuses on the pursuit of CE in state owned enterprises of a developing country context in the case of Ethiopian airlines. It explores how CE unfolds in state owned enterprises through innovation practice and investigates the role of HRM practices for nurturing CE. The dissertation offers significant contributions to both theoretical and practical understanding of CE within an aviation sector and state-owned enterprises in developing countries. This dissertation contributes to the field of CE by highlighting contextual dimensions and extending the conversation on contextualizing entrepreneurship at the organizational level, acknowledging the context of CE. It advances the theoretical understanding of the role of contexts in CE literature. The dissertation (see chapter 2) identifies and organizes the various contextual dimensions—business, spatial, social, institutional, organizational, and ownership contexts—that influence CE processes, thereby filling a notable gap in the literature where such contextual factors have been underexplored. This dissertation advances the understanding of how different contexts shape the enablers and outcomes of entrepreneurial activities within organizations, highlighting the heterogeneity of CE practices across different settings.

Furthermore, the dissertation broadens insights into how state-owned enterprises can effectively implement CE, particularly through innovation practice, to remain competitive despite regulatory and institutional challenges they face. This dissertation also advances our understanding of the input, process, and output of innovations in state-owned enterprises, whereby how innovative ideas are initiated, developed, and implemented. The dissertation demonstrates how the different contextual dimensions including business, spatial, social, institutional, organizational, and ownership contexts shape CE initiatives and influence the outcomes of innovations. Additionally, the dissertation highlights understanding of the socio-economic contributions of CE in the public sector which reveals that CE can extend beyond financial objectives to enhance broader societal benefits.

Furthermore, the findings of this dissertation offer valuable insights for airline management seeking to foster entrepreneurial activities within corporate environments. Public organizations can also use this research to foster an entrepreneurial culture, enhancing their adaptability and responsiveness to market demands. The dissertation also identifies the strategic importance of HR practices that align with and support CE to foster a culture of innovation within the public sector organizations. Moreover, this dissertation

offers insights to policymakers by illustrating how government support and regulatory frameworks can shape the innovative agendas of state-owned enterprises. With the help of appropriate conducive policies and strategic incentives, governments can play an essential role in enhancing the competitive positioning and overall performance of state-owned enterprises in the global market. Furthermore, in addition to the significance of theoretical advancements in CE, this research also offers insights for practitioners to drive innovation and performance within their organizations through engaging with and nurturing CE.

### **1.7. Scope of the Study**

The main aim of this dissertation is to explore how CE unfolds in state owned enterprise through innovation practices and investigates the role of HRM practices for CE in a developing country context in the case of Ethiopian airlines. State owned enterprises contribute to the growth and development of a nation. Understanding the application of CE in such a sector would benefit to foster entrepreneurial activities and develop entrepreneurial culture for better performance. This dissertation specifically focused on the pursuit of CE in state owned enterprises through innovation practice and role of HRM practices for the implementation of CE in the public sector context. Furthermore, the dissertation focused on the contextual dimension of business, spatial, social, institutional, organizational and ownership context that influences the effectiveness of CE whereby emphasizing the importance of contextualization. The first paper (See chapter 2) offers a systematic review of the literature on the contextualization of CE, highlighting the role of context in CE research and forward future research agenda. However, the other two empirical papers (See chapter 3 and 4) is limited geographically in a developing country context particularly Ethiopia using Ethiopian airlines as a case study.

Ethiopian airline is selected as a case due to being one of the largest state-owned enterprises contributing to the growth of Ethiopian economy and known for their innovativeness. The second empirical paper of the dissertation (see chapter 3) used interview data gathered by conducting 22 interviews with directors and senior experts in business development, R&D and innovation hubs, as well as marketing and finance officials. The third paper of the dissertation (see chapter 4) gathered data through interviews with 18 participants, including managers and officials from HR departments, business development, and R&D and innovation hubs. Separate interview guides were developed for each of the empirical papers in accordance with their respective research objectives. However, two interviews

from the first paper were reused in the third paper. Furthermore, four participants were involved in both papers, each using different interview guides specific to the respective papers and were recorded accordingly.

### **1.8. Limitations of the Study**

This dissertation has the following limitations that offer opportunities for future research. Methodologically, the two empirical papers (See chapter 3 and 4) focuses on Ethiopian airlines as a single case study which may limit the generalizability of the study findings. Different industries, organizational cultures, and environmental factors may yield varied outcomes. Future research could consider multiple case studies across different state-owned enterprises and industries to further explore and extend the results. This could also provide a more comprehensive understanding of how contextual factors influence CE in state-owned enterprises. Moreover, a longitudinal approach could offer deeper insights into how innovation practices and CE evolve over time whereby capturing the long-term effects and sustainability of these initiatives.

Furthermore, paper 2 and paper 3 (See chapter 3 and 4) of the dissertation primarily focused on limited departments such as business development, R&D innovation hubs, HR, marketing and finance. This is due to the large number of units across the airlines and these departments are primarily suitable to collect data in relation to innovative related activities and HRM practices. Furthermore, I could not perform lengthy interviews due to time constraints, especially those at directors' and managerial levels. Thus, future research should address the identified limitations and expand the scope to include diverse contexts and methodologies, providing a richer and more comprehensive understanding of CE.

### **1.9. Structure of the Dissertation**

The dissertation is organized into five chapters. The first chapter covered the introduction of the study, concise literature, statement of the problem, research questions, objectives, significance, scope, and limitation of the study.

The second chapter (Paper 1) is a systematic review of contextualizing CE and future research agenda. It uses a systematic literature review approach to analyze and discuss 214 articles published in top-tier journals from 1985 to 2023. This paper is published as Girma Aragaw, Haag, & Baù, (2025). Contextualizing corporate entrepreneurship: a systematic

review and future research agenda. *Entrepreneurship & Regional Development*, 37(1-2), 1-37. An earlier version of the paper was presented at the 83rd Annual Meeting of the Academy of Management (AOM) held on 4-8 August 2023, Boston, Massachusetts, USA.

The third chapter (Paper 2) investigates how CE unfolds in state-owned enterprises through innovation practice. The paper focus on the pursuit of corporate entrepreneurship through innovation outcomes in state-owned enterprises in a developing country context by exploring a single case study of Ethiopian Airlines. This paper is co-authored with Kajsa Haag, Massimo Bau, and Asres Abitie. The paper was accepted and presented at Research in Entrepreneurship and Small Business (RENT) annual conference organized by European Institute for Advanced Studies in Management (EIASM) under the conference theme: *The Multiple Faces of Entrepreneurship: embracing the Diversity of Ambitions, Processes and Practices Worldwide*, held in Audencia, Nantes, France on 13-15 November 2024.

The fourth chapter (Paper 3) investigates the role of HRM practices for corporate entrepreneurship in state owned enterprises insights from Ethiopian airlines. The paper focuses on how these practices are adapted to foster an entrepreneurial culture within the organization. This paper is single authored by Zerihun Girma.

The final chapter provides a summary of the discussion/conclusion and implications of what the three papers together contribute with.

## CHAPTER 2: CONTEXTUALIZING CORPORATE ENTREPRENEURSHIP: A SYSTEMATIC REVIEW AND FUTURE RESEARCH AGENDA<sup>12</sup>

### Abstract

*Corporate entrepreneurship (CE) is an essential concept in entrepreneurship research. Many scholars have shown CE theoretical and empirical implications for firms' survival, development, and growth. We use a systematic literature review approach to analyse and discuss 214 articles published in top-tier journals from 1985 to 2023. This review proposes a conceptual model and highlights that little attention has been given to discussing the role of context in the corporate entrepreneurial process. Thus, we propose a research agenda for contextualizing corporate entrepreneurship concerning business, social, spatial, institutional, organizational, and ownership contexts.*

**Keywords:** *corporate entrepreneurship; context; review; research agenda; entrepreneurial opportunities; entrepreneurial behavior; internal and external enablers*

### 2.1 Introduction

Globally, the business environment is becoming increasingly dynamic, unpredictable, and competitive (Kuratko et al., 2004). Current challenges related to climate change, pandemics, and poverty put new pressure on corporations to achieve purpose-driven progress (George et al., 2021). In such an environment, corporate entrepreneurship (CE) has been shown to play a significant role in firms' survival, development, and growth (Zahra et al., 2009) in rapidly changing environments (Lumpkin & Dess, 1996). In this literature review, we adopt the definition of CE proposed by Sharma and Chrisman (1999:18) as “the process whereby an individual or a group of individuals, in association with an existing organization, create a new organization or instigate renewal or innovation within that organization.”

CE is a multifaceted phenomenon explored and described from different perspectives. Although CE is a relevant research topic in several fields, such as HR (Haar & White, 2013) and strategy (Barringer & Bluedorn, 1999), the bulk of the related research is

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typically found in the entrepreneurship literature (see **Table 2.1**), which is also the disciplinary home of *Entrepreneurship and Regional Development*. Nonetheless, we argue for an essential theoretical and empirical gap connected to the contexts in which CE occurs. Considering the heterogeneity of contexts and the need for indigenous theory in management and entrepreneurship studies, scholars have called for considering these issues (Bruton et al., 2022; Filatotchev et al., 2022). In particular, Welter (2011) points to the need to contextualize entrepreneurship research. Contextualization connects an entrepreneurial organization with its environment and allows researchers to understand and integrate existing frameworks and theories from different perspectives of origins, forms, functioning, and diverse outcomes (Johannisson, 1994 et al.; Zahra, 2015). In this literature review, we extend these calls to the domain of CE. Our objective is to discuss the current literature on CE and to suggest a future research agenda for CE that elucidates the importance of contextualization. The contexts considered in our review are business, spatial, social, and institutional, derived from Welter (2011), and organizational and ownership aspects, derived from Foss et al. (2021) and Zahra (2015).

We use a systematic literature review approach that considers more than 35 years of CE research in top-tier journals. This review contextualizes the enablers of entrepreneurial opportunities, corporate strategies, and HR practices that sustain the entrepreneurial behavior of existing organizations and CE output in corporate venturing, innovation, and strategic renewal. We develop and discuss an input-process-output framework of CE activities in existing organizations.

This review contributes to the field of CE by adding contextual dimensions and extending the conversation on contextualizing entrepreneurship at the organizational level, acknowledging the context of CE. Furthermore, we contribute by offering a conceptual model that organizes the reviewed literature and identifying research gaps for future research on various contextual aspects of CE.

In the following sections, we introduce the concept and role of context in CE research. Next, we include a description of our review method. Thereafter, a conceptual model developed from the review analysis is presented. Finally, we discuss promising avenues for future research and offer concluding remarks.

**TABLE 2.1 – Journals and published articles**

<b>Journal</b>	<b>Field</b>	<b>AJG 21</b>	<b>Stage 1</b>	<b>Stage 2</b>
Academy of Management Annals	GEN-MAN&ETHICS	4*	0	0
Academy of Management Journal	GEN-MAN&ETHICS	4*	12	4
Academy of Management Review	GEN-MAN&ETHICS	4*	4	2
Administrative Science Quarterly	GEN-MAN&ETHICS	4*	5	2
Journal of Management	GEN-MAN&ETHICS	4*	30	9
Academy of Management Perspectives	GEN-MAN&ETHICS	4	3	2
British Journal of Management	GEN-MAN&ETHICS	4	8	1
Business Ethics Quarterly	GEN-MAN&ETHICS	4	0	0
Journal of Management Studies	GEN-MAN&ETHICS	4	38	16
Entrepreneurship Theory and Practice	ENT&SBM	4	78	24
Journal of Business Venturing	ENT&SBM	4	88	36
Strategic Entrepreneurship Journal	ENT&SBM	4	35	4
Entrepreneurship and Regional Development	ENT&SBM	3	16	4
Family Business Review	ENT&SBM	3	8	1
International Journal of Entrepreneurial Behaviour and Research	ENT&SBM	3	18	9
International Small Business Journal	ENT&SBM	3	29	4
Journal of Small Business Management	ENT&SBM	3	43	8
Small Business Economics	ENT&SBM	3	47	27
Human Resource Management Journal (UK)	HRM&EMP	4*	3	2
British Journal of Industrial Relations	HRM&EMP	4	0	0
Human Resource Management (USA)	HRM&EMP	4	8	5
Industrial Relations	HRM&EMP	4	0	0
Work, Employment and Society	HRM&EMP	4	0	0
Journal of International Business Studies	IB&AREA	4*	6	2
Journal of World Business	IB&AREA	4	14	7
Research Policy	INNOV	4*	12	4
Journal of Product Innovation Management	INNOV	4	21	9
Organization Science	ORG STUD	4*	29	7
Human Relations	ORG STUD	4	1	0
Leadership Quarterly	ORG STUD	4	2	0
Organization Studies	ORG STUD	4	4	0
Organizational Research Methods	ORG STUD	4	2	0
Public Administration Review	PUB SEC	4*	0	0
Governance	PUB SEC	4	0	0
Journal of Public Administration Research and Theory	PUB SEC	4	1	1
Public Administration	PUB SEC	4	0	0
Public Management Review	PUB SEC	4	6	3
Strategic Management Journal	STRAT	4*	46	19
Global Strategy Journal	STRAT	4	5	2
<b>TOTAL</b>			<b>622</b>	<b>214</b>

## 2.2 Introducing CE

Several definitions of CE have been proposed. Authors have referred to Burgelman's (1983:1349) seminal definition of CE as "the process whereby firms engage in diversification through internal development". According to Burgelman (1983), diversification requires a firm to use a combination of new resources to undertake activities in unrelated or marginally related areas within its existing domain of competencies. Burgelman's definition of CE stresses the internal venturing activities of a firm through the utilization of existing competencies. In addition to discussing internal venturing, Guth and Ginsberg (1990:5) described "CE in terms of two types of phenomena: (1) the birth of new businesses within existing organizations, i.e., internal innovation or venturing, and (2) the transformation of organizations through a renewal of the key ideas on which they are built, i.e., strategic renewal." Consistent with Guth and Ginsberg (1990), Zahra (1993:321) defined CE as "a process of organizational renewal that has two distinct but related dimensions: innovation and venturing, and strategic renewal."

Moreover, Zahra (1995:227) conceptualized CE as "the sum of a company's innovation, renewal, and venturing efforts." Similarly, Sharma and Chrisman (1999:18) described CE as "the process whereby an individual or a group of individuals, in association with an existing organization, create a new organization or instigate renewal or innovation within that organization." Corporate venturing is associated with creating new businesses within an organization through expanding operations in existing or new markets (Zahra, 1995). Innovation is related to creating and introducing new products, processes, and systems (Zahra, 1996). Strategic renewal involves using a new combination of resources, improving competitiveness through new products or processes for creating wealth within an established organization (Guth & Ginsberg, 1990; Zahra, 1993).

Covin and Miles (1999:50) explained CE as "the presence of innovation plus the presence of the objective of rejuvenating or purposefully redefining organizations, markets or industries to create or sustain competitive superiority." Covin and Miles (1999) identified four forms of the phenomenon of CE: sustained regeneration, organizational rejuvenation, strategic renewal, and domain redefinition. On the other hand, CE is conceptualized not only as the creation of a new business inside an existing firm but also as other innovative activities, such as the "development of new products, services, technologies, administrative technologies, strategies, and competitive postures" (Antonic & Hisrich,

2001:498). In addition, CE is conceptualized in terms of entrepreneurial behavior involving organizational sanctions and commitments to introduce different types of innovative activities (Hornsby et al., 2002). Furthermore, as a strategy, CE requires a set of commitments, decisions, and entrepreneurial behaviors necessary for a firm to enhance its current and future competitive success (Kuratko et al., 2004). From the strategy perspective, Ireland et al. (2009:21) defined CE strategy as “a vision-directed, organization-wide reliance on entrepreneurial behavior that purposefully and continuously rejuvenates the organization and shapes the scope of its operations through the recognition and exploitation of entrepreneurial opportunity.” Thus, CE has been seen as an important factor contributing to the success and performance of a firm, allowing it to explore new opportunities and competencies in the market (Covin & Miles, 1999; Kuratko et al., 2005; Zahra, 1996). Moreover, CE can be an appropriate adaptation mechanism when organizations face a rapidly changing competitive environment (Lumpkin & Dess, 1996).

### **2.2.1 The role of context in entrepreneurship research**

There has been growing recognition and consideration of context in entrepreneurship research (Baker & Welter, 2018; Korsgaard et al., 2022; Shepherd et al., 2019; Welter, 2011; Wigren-Christoferson et al., 2022; Zahra, 2015). Context is the “*circumstances, conditions, situations, or environments that are external to the respective phenomenon and enable or constrain it*” (Welter, 2011: 167). The study of context in entrepreneurship has generated novel explanations of the phenomenon and fostered the emergence of various theoretical perspectives in entrepreneurship research across different settings (Zahra, 2015). The need to understand the different contextual variables influencing the entrepreneurial efforts of a firm calls for further research to advance the knowledge and theoretical perspectives of the area (Zahra et al., 2014), especially considering that entrepreneurs are embedded in different contexts simultaneously (Korsgaard et al., 2022). Context is also significant in understanding the situations under which entrepreneurship occurs, how and why it arises, and who becomes involved (Welter, 2011). For example, entrepreneurs in different cultural contexts perceive the value of a particular resource differently and identify opportunities differently (Dana, 2007).

Welter (2011) identifies context dimensions as business, social, spatial, and institutional contexts. The business context, which focuses on industries and markets, is the most studied context in entrepreneurship research. The social context comprises the use of the

networks of a firm with various stakeholders and communities to recognize and utilize entrepreneurial opportunities important to the firm. The spatial context emphasizes the importance of geographical location for entrepreneurial opportunities. The institutional context focuses on the influence of formal and informal institutions on opportunity recognition. In addition to Welter's (2011) context dimensions, we include ownership and organizational contexts, which are emphasized in entrepreneurship research (Foss et al., 2021; Zahra, 2015).

This review attempts to combine the domain of CE with the various contexts of entrepreneurship related to the recognition and exploitation of entrepreneurial opportunities in existing organizations. Understanding the influences of context across CE activities is important for advancing the theoretical perspectives and frameworks of the domain to provide a better explanation of CE in specific contexts (Zahra & Covin, 1995; Zahra, 2015). Therefore, contextualizing CE within business, spatial, social, institutional, organizational, and ownership settings could open avenues for future research to further strengthen the knowledge and theoretical perspectives needed to explain the phenomenon based on novel insights.

## **2.3 Method**

We used a systematic literature review because it helps uncover evidence on the topic and allows the opportunity to combine the knowledge from the literature with creating a foundation for future research (Kraus et al., 2020). Moreover, a systematic literature review allows for determining the effects across different studies and discovering what future studies are beneficial for developing the study area (Munn et al., 2018; Snyder, 2019). To guide our systematic work, we followed the stages described by Kraus et al., (2020) and implemented in Palmaccio et al. (2021): 1) plan the review; 2) identify and evaluate articles; 3) extract and synthesize data; and 4) disseminate the results.

### **Stage 1. Plan the review**

*Identify the need.* Previous review articles and special issues are important to our study and signal the field's maturity. Therefore, taking stock of previous works, we identified one literature review on CE (Nason et al., 2015), two bibliometric studies (Lampe et al., 2020; Urbano et al., 2022), and one meta-analysis (Bierwerth et al., 2015). Nason et al. (2015) focused on the role of organizational size in the heterogeneous nature of CE.

Bibliometric studies have clustered the structure and theoretical foundations of the entrepreneurial organization literature (Lampe et al., 2020) and mapped the evolution of CE as a research field (Urbano et al., 2022). Finally, Bierwerth et al. (2015) conducted a meta-analytical study that mapped the nexus between CE and performance. We also identified five special issues related to CE (Corbett et al., 2013; Guth & Ginsberg, 1990; Kuratko et al., 2015; Minola et al., 2021; Phan et al., 2009).

Nonetheless, the domain of CE has not systematically considered the quest to contextualize entrepreneurship research (e.g., Welter, 2011). We thereby find justification for systematically reviewing the area of CE further to advance our understanding and knowledge of this topic. We review CE, focusing on the internal and external enablers of entrepreneurial opportunities resulting in different CE activities of existing organizations. Furthermore, we considered three phases: input, process, and outcomes of CE in established organizations. We further look at the contextual dimension of CE in terms of business, social, spatial, institutional, organizational, and ownership contexts. The aspects of CE play out differently in different contexts, so we stress the need to contextualize the input, process, and output phases to advance our understanding of CE. Thus, systematically reviewing CE enables us to identify gaps and address future research.

***Review protocol.*** The data were derived from the Web of Science core collection database using keywords (“corporate entrepreneur\*”, “corporate ventur\*”, “strategic renewal”, and “intrapreneur\*”) appearing in the title, keywords, and abstracts of the articles. This initial search of the Web of Science resulted in 2 883 articles. For better quality of the review process, our research team agreed to use the Web of Science database, focusing on top-tier journals rated in the AJG list (2021) as 3-4\*. We further limited our search to journals in fields relevant to CE. For the core field of “Entrepreneurship and Small Business Management”, we included all the journals ranked as AJG 3 or above. In the fields of “General Management, Ethics, Gender, and Social Responsibility,” “Human Resource Management and Employment Studies,” “Innovation,” “International Business and Area Studies,” “Organizational Studies,” “Public Sector,” and “Strategy,” we included all the journals in AJG 4 and 4\*. With these restrictions, our search resulted in 622 articles.

## **Stage 2: Identify and evaluate the articles**

We analysed the abstracts of the 622 articles to identify those focused on phases and dimensions of CE in line with our research aim. We followed a three-step iterative process

for the inclusion and exclusion of articles in the review. First, we carefully read the abstracts, and those articles that did not rely on the concepts of CE or its forms in terms of corporate venturing, innovation, or strategic renewal in the abstract were excluded from the sample. In this regard, we reduced our sample to 236 articles. Second, a careful reading of the full articles was performed to identify the final sample articles for the review. In this regard, we excluded articles that mentioned one of the keywords but did not address research on CE. In addition, we excluded articles focused on general venture capital investment, which is believed to be a broader concept than the study area. Moreover, innovation is considered one of the core dimensions of CE activities; relevant articles focus on CE. For example, the review did not include studies related to innovation from a “technological push” perspective (Bierwerth et al., 2015). By doing so, we excluded 22 articles, yielding a final sample of 214 contributions. Finally, the third step examined the 214 identified papers to identify the role of context (business, spatial, social, institutional, organizational, ownership) in theoretically defining and empirically assessing CE. This was done by reading the full text of each article once more and identifying clear references to any of the six contextual dimensions. In doing so, we singled out 42 contributions that devoted explicit attention to closely describing at least one of the contextual dimensions.

### **Stage 3: Extract and synthesize the data**

*Data extraction.* We retrieved the final sample of 214 articles from the Web of Science database and produced a spreadsheet for the later review steps. The table provides the following information: author(s), article titles, source title, publication year, volume, issue, pages, article number, source and document type, publication stage, DOI, abstract, and keywords.

*Data Synthesis.* We added columns to the spreadsheet to aid the systematic analysis and capture methods, theories, hypotheses, sample information, countries, sectors, main findings, and conclusions. Finally, we conducted a content analysis of the full-text articles that allowed us to identify categories and synthesize the main themes and contextual dimensions in the sample.

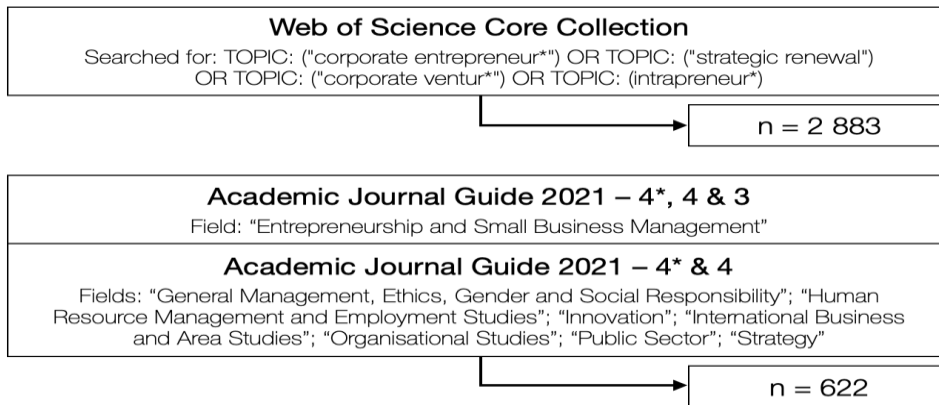
### **Stage 4: Disseminating the review results**

Our systematic literature review tries to identify those enablers of entrepreneurial opportunities in existing organizations resulting in the pursuit of different CE activities.

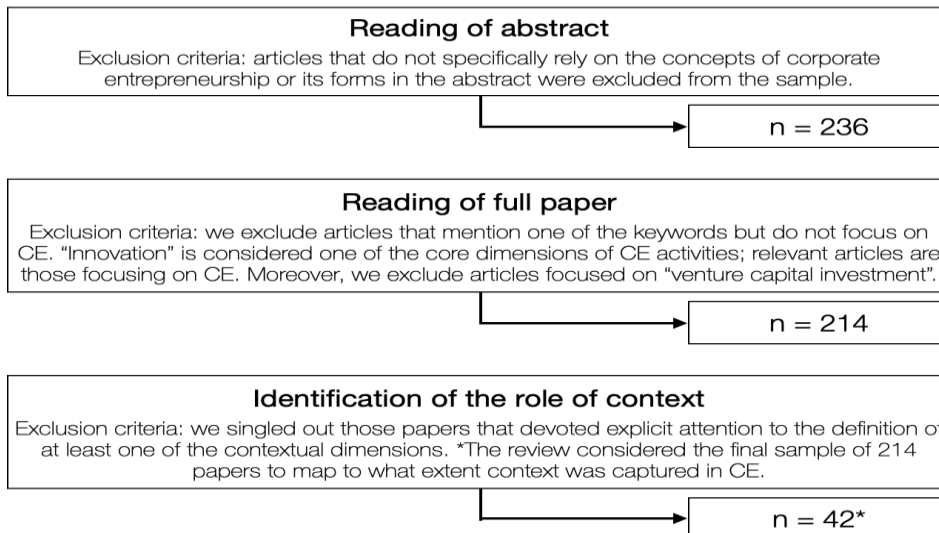
Thus, we develop and analyse the conceptual model from the review articles organized in terms of an input, process, and output framework. Then, we discuss the context of CE in terms of business, social, spatial, institutional, organizational, and ownership dimensions to identify research gaps. Finally, adopting the approach of the most recent systematic reviews in the entrepreneurship literature, we developed a research agenda (see, e.g., Ivanycheva et al., 2023; Shepherd et al., 2019; 2021).

An overview of the four stages of our systematic review method is illustrated in **Figure 2.1**, and the list with the number of articles in each journal and field of study is presented in **Table 2.1**.

#### STAGE 1 - PLAN THE REVIEW



#### STAGE 2 - IDENTIFY AND EVALUATE ARTICLES



#### STAGE 3 - EXTRACT AND SYNTHESIZE DATA

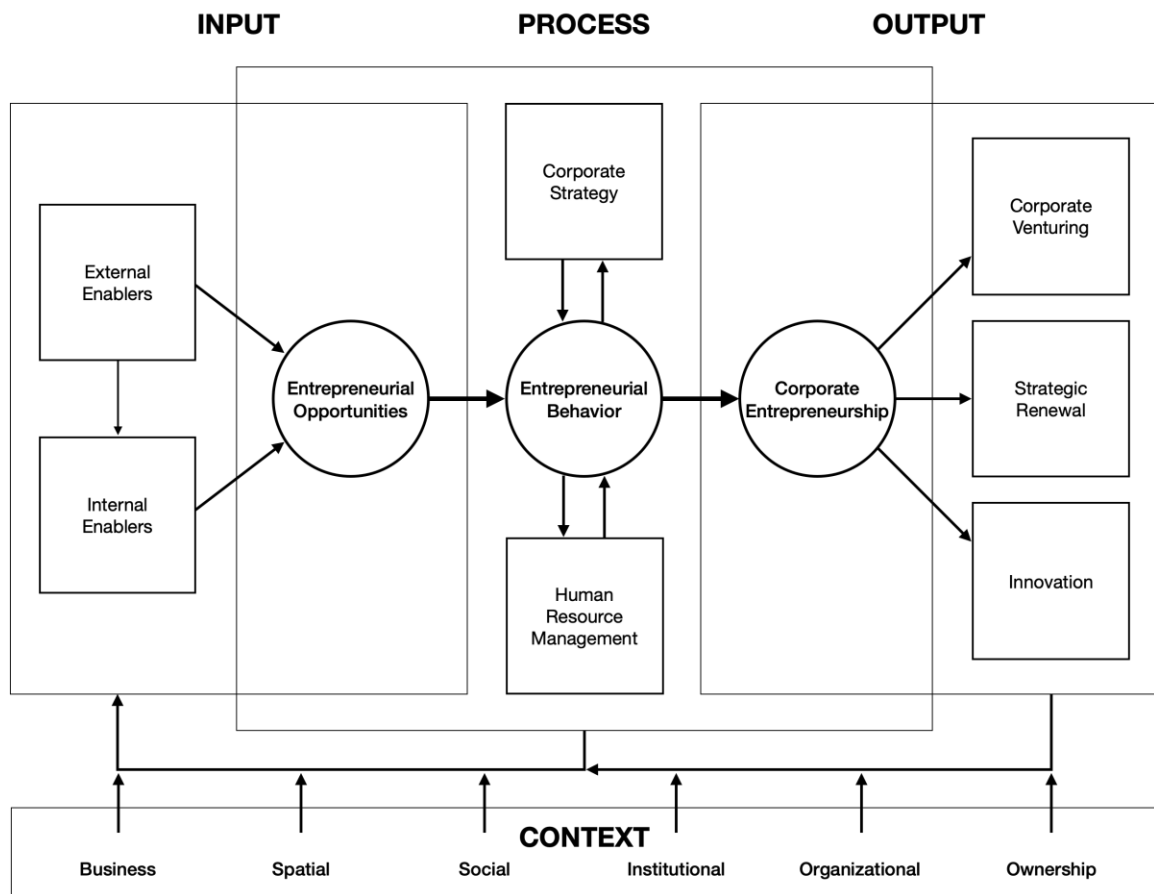


#### STAGE 4 - DISSEMINATE THE REVIEW RESULTS

**Figure 2.1** – Systematic review method

## 2.4 Conceptual Model

The conceptual model presented in this review is composed of, adapted to, and organized by the literature included in the review. The model depicts the relationships between the three phases of input, process, and output and outlines the six contextual dimensions we have mapped across the studies. The first part of the model explains the input needed as an enabler to facilitate entrepreneurial opportunities in existing organizations that result in entrepreneurial actions to pursue CE. The model's input phase combines external and internal enablers that facilitate firms' identification and exploitation of entrepreneurial opportunities (EO) in existing organizations to engage in different CE activities. The second phase of the model explains the procedural aspect of how entrepreneurial opportunities trigger entrepreneurial behavior (EB) that leads to CE. Corporate strategy and human resource-related aspects are included to reveal how these aspects facilitate entrepreneurial actions in existing organizations. In the third phase of the model, the output of CE activities is explained in terms of corporate venturing, innovation, and strategic renewal. The bottom line presents the six contextual dimensions: business, spatial, social, institutional, organizational, and ownership context. Each contextual dimension applies to the three phases and influences CE input, process, and output. **Figure 2.2** summarizes the conceptual model used to organize, structure, and discuss the literature. This conceptual model highlights the broad categories under which the various themes identified in the literature are further grouped. The papers considered in this review can appear in multiple phases, categories, and contextual dimensions. In the following sections, each part of the model is discussed and analysed according to the literature included in the review, and an overview of how CE has been contextualized in previous studies is provided.



**Figure 2.2 – The conceptual model**

### 2.4.1 Input

#### Entrepreneurial opportunities

Research highlights the importance of recognizing and exploiting EO for established organizations to gain a competitive edge, as such opportunities are central to CE strategies (Barney et al., 2018; Bloodgood et al., 2015; Ireland et al., 2009). Studies indicate that in dynamic industrial contexts, firms must continually identify such opportunities (De Clercq et al., 2010), which can arise across different industry segments (Hoskisson et al., 2011). Exploring EO is linked to enhancing firms' engagement in CE (An et al., 2018; Ireland et al., 2009; Zahra, 1996). This process not only stimulates firms' existing and new capabilities (Ireland et al., 2009) but also relies on the contributions of knowledgeable and experienced employees and management teams (Bloodgood et al., 2015; Heavey & Simsek, 2013; Ren & Guo, 2011; Turro et al., 2016). However, an organizational context characterized by supportive structures, cultures, and reward systems is essential for effectively recognizing and leveraging these opportunities (Ireland et al., 2009).

## **External Enablers**

Davidsson (2015, p. 683) defines external enablers as “distinct, external circumstance[s]” that have “the potential of playing an essential role in eliciting and/or enabling a variety of entrepreneurial endeavors by several (potential) actors.” According to Davidsson et al. (2020), “external enablers occur and operate in a context of existing circumstances, which we analytically construe as stable to contrast the change represented by the enabler. In this sense, external enablers are relational.” They include forces and elements external to an organization’s boundaries that influence its entrepreneurial actions (Davidsson et al., 2020). The external environment poses challenges and offers new opportunities for firms to respond creatively through CE. Cestino Castilla et al. (*in press*) recently presented how external enablers in existing organizations favour the emergence, novelty, and persistence of CE initiatives. Hence, the external enablers in the proposed model relate to the dimensions of a firm’s external environment. These dimensions include intense competition, technological change, government policy and support, and environmental scanning. While external enablers are deeply rooted in the context in which firms operate, we found a limited number of papers that embrace the opportunity to deepen their consideration of the different dimensions of context (e.g., Boone et al., 2019; Doh & Pearce, 2004; Romero-Martinez et al., 2010; Vanacker et al., 2021; Yiu & Lau, 2008).

***Intense competition:*** Intense competition enhances CE and adaptability to change (Romero-Martinez et al., 2010; Zahra, 1993). Studies link competition for resources to increased entrepreneurial activities, innovation, and new ventures (Antonic & Hisrich, 2001; Guth & Ginsberg, 1990), pushing firms to develop new competencies (Basu & Wadhwa, 2013), transforming the organizational context (Yiu & Lau, 2008), and balancing exploitation with exploration (Kammerlander et al., 2015). With particular attention given to the business context, Yiu and Lau (2008) focus on emerging markets, showing how firms use CE for resource configuration and strategic renewal and highlighting the role of social networks. Romero-Martinez et al. (2010) explore changes in the organizational context due to privatization, showing the adaptability needed for dynamic markets and how shifts from state to private ownership affect CE, governance, and management, revealing the intricate relationship between the organizational context and competitive strategy.

***Technological change:*** Globalization and technological evolution increase the demands on firms’ CE efforts. Technological advancements impact mature industries, new product

development, and innovation activities (Agarwal & Helfat, 2009; Kim & Pennings, 2009; Zahra, 1993), revealing the necessity of innovation and renewal to navigate technological uncertainties and disruptions (Ahuja & Lampert, 2001; Boone et al., 2019), where technological change stimulates CE in existing organizations (Kellermanns & Eddleston, 2006; Zahra, 1996). The business context is therefore led by firms investing significantly in product and technology development, exploring new technologies, leveraging assets for product improvement, and engaging in venturing and innovation (Zahra & Covin, 1995; Basu & Wadhwa, 2013). Additionally, the complexity and pace of technological transitions stimulate the search for external knowledge (Keil et al., 2008). Unexpectedly, when mapping this cluster of studies, we found very little attention given to the role of context. Only one paper has considered the organizational context by capturing how TMT nationality diversity and culture impact organizational structures (e.g., decentralization) and facilitate or hinder corporate entrepreneurship and innovation (Boone et al., 2019).

***Government policy and support:*** Government policy significantly influences the institutional context, impacting CE by shaping entrepreneurial decisions (Doha & Pearce, 2004; Fini & Toschi, 2016). Policy changes such as democratization, privatization, deregulation, and trade liberalization transform market structures and business strategies, forcing the need to change operations and strategic positions (Yiu & Lau, 2008). Governments are fundamental in providing firms with funding, information, services, and legitimacy, creating the conditions for developing new entrepreneurial initiatives and ventures (Doha & Pearce, 2004; Heavey & Simsek, 2013; Yiu & Lau, 2008). Moreover, government policy, social networks, and country-specific institutions jointly affect CE, directly impacting decisions and performance. Studies such as Yiu and Lau (2008) emphasize the role of social networks in providing resources and legitimacy for competitive advantage, while research by Doh and Pearce (2004) and Vanacker et al. (2021) highlights the need for firms to respond to policy changes and how country-specific institutions affect entrepreneurial success.

***Environmental Scanning:*** Firms need to conduct thorough environmental scanning to detect and leverage changes in their environment, aiding in the timely gathering of crucial information and identifying threats and opportunities (Barringer & Bluedorn, 1999; Zahra, 1991). Such scanning has significantly contributed to CE by supporting continuous innovation and competitiveness (Antoncic & Hisrich, 2001; Zahra, 1991).

## **Internal Enablers**

We define internal enablers as the forces related to a firm's internal environment influencing its CE actions. The internal enablers consist of several factors internal to the organization that enhance the entrepreneurial opportunities of the firm, enabling it to interact effectively in a competitive environment. The internal environment of an organization could also enable it to promote and pursue different entrepreneurial opportunities through which it could actively innovate and create a new venture to compete in the marketplace. Kuratko et al. (1990) proposed the use of three internal enablers in terms of management support, organizational structure, reward, and resource availability. These scales were further refined in more recent studies by Hornsby et al. (2002; 2009) and referred to as the *Corporate Entrepreneurship Assessment Instrument*. This is a key instrument for researchers to use to measure a firm's organizational preparedness for corporate entrepreneurship. Therefore, the internal enablers in the proposed model relate to several basic dimensions of a firm's internal factors, which include organizational structure, organizational culture, top management support, work discretion/autonomy, effective reinforcement, and time availability. While internal enablers are affected by the different types of context, it is still remarkable to emphasize that only a small portion of the studies that we mapped in this group made an extensive effort to contextualize their empirical setting; nonetheless, we identified some notable examples (e.g., Biniari, 2012; De Massis et al., 2021; Fayolle et al., 2010; Hughes & Mustafa, 2017; Lee et al., 2019; Meynhardt & Diefenbach, 2012; Nason et al., 2015; Raitis et al., 2021).

***Organizational structure:*** Organizational structure impacts firms' CE capabilities (Brazeal, 1993; De Massis, 2021; Marvel et al., 2007). Restructuring a firm to enhance innovation and decision-making has been recommended (Antonicic & Hisrich, 2001; Zahra, 1993). The degree of centralization or decentralization affects the pursuit of entrepreneurial opportunities, with rigid structures hindering and decentralized ones favouring idea generation and innovation (Hornsby et al., 2002; Ireland et al., 2009; Ling et al., 2008; Russell & Russell, 1992). Deepening the organizational context and pursuing CE initiatives in complex, multilayered organizations is challenging (Kuratko et al., 1990). Two studies devoted particular effort to describing the organizational context and its implications for CE. Nason et al. (2015) argue that organizational size influences structures, processes, and cultures, affecting CE scalability. Fayolle et al. (2010) further explore how corporate culture, including values, norms, and practices, impacts

entrepreneurial orientation (EO), underscoring the importance of organizational design and culture in fostering entrepreneurial activities.

**Organizational culture:** Organizational culture fosters CE through management support, work discretion, and rewards that are driven by shared assumptions and practices (Fayolle et al., 2010; Hornsby et al., 2002; Ireland et al., 2009). Key cultural elements are identified as commitment, responsibility acceptance, and high standards. Cultures that encourage proactivity, innovation, and risk-taking significantly influence CE (Kuratko et al., 2005). We identified a few studies that assess the effects of spatial, ownership, and social contexts on CE. Fayolle et al. (2010) discuss how national and cultural contexts shape CE; De Massis et al. (2021) examine the impact of ownership structures on entrepreneurial behavior, highlighting differences between family and nonfamily firms; and Raitis et al. (2021) explore the influence of family and community values in family firms. These studies suggest that promoting CE requires a comprehensive understanding of both internal organizational dynamics and external cultural, spatial, and social influences.

**Top management support:** Top management is crucial in fostering entrepreneurial activities within firms, with support linked to positive entrepreneurial outcomes. Research highlights the importance of top managers in promoting and facilitating entrepreneurship through resources, expertise, and institutional support (Biniari, 2012; Crawford & Krieser, 2015; Kuratko et al., 2005). Middle and operational managers are encouraged to adopt entrepreneurial behaviors when they perceive top management support (Hornsby et al., 2009). Top managers who are able to leverage opportunities, processes, and social skills favour the pursuit of entrepreneurial strategies (Kwee et al., 2011; Shimizu, 2012). Hughes & Mustafa (2017), Biniari (2012), and Lee et al. (2019) enrich our understanding of the complexities surrounding top management's support for entrepreneurial activities. Fostering CE involves not only top management's direct actions but also the interplay of business, institutional, social, and ownership contexts. For instance, Hughes & Mustafa (2017) highlight the importance of business and institutional contexts in emerging economies, showing how internal factors such as management support and organizational culture, in addition to external regulatory frameworks and policies, play a pivotal role in enabling or constraining CE activities. Biniari (2012) and Lee et al. (2019) discuss the critical influence of social and ownership contexts. Biniari (2012) underscores the importance of emotional and social interactions between corporate entrepreneurs and other organizational members, indicating that emotional embeddedness is crucial in the

entrepreneurial process. Lee et al. (2019) extend the discussion by examining the impact of family involvement and nepotism on the dynamics of top management teams, thereby affecting CE.

**Work discretion/autonomy:** Research highlights the importance of granting autonomy to middle and operational managers to help organizations adapt to competitive changes (Floyd & Lane 2000; Shimizu, 2012). Work discretion/autonomy is characterized by an organization's tolerance for failure, decision-making freedom, minimal oversight, and delegation of authority to lower-level staff (Hornsby et al., 2002; Hornsby et al., 2009; Kuratko et al., 2005). Entrepreneurial outcomes often stem from individuals who are given the freedom to experiment entrepreneurially. Particularly interesting is the paper by Meynhardt & Diefenbach (2012), which extends this discussion by examining the impact of public sector reforms on EO within the context of Germany's Federal Labor Agency. Their research focused on the institutional and ownership contexts of entrepreneurship by analysing how these reforms influence EO in the public sector. This perspective is particularly valuable because it highlights the unique challenges and opportunities associated with fostering entrepreneurship in a context that traditionally prioritizes stability and predictability over entrepreneurial risk-taking and innovation.

**Effective reinforcement:** Research defines 'rewards and reinforcement' as systems that provide incentives based on CE activities and successes, significantly influencing CE outcomes (Hornsby et al., 2002; Kreiser et al., 2021). Effective reinforcement is positively related to CE, particularly impacting lower-level managers who may be more risk-averse; rewards help mitigate this aversion and motivate entrepreneurial behavior by compensating for risks (Block & Ornati, 1987). Without rewards or recognition for entrepreneurial efforts, there is little extrinsic motivation for engaging in risky CE activities (Hornsby et al., 2009).

**Time availability:** Managerial time availability is crucial for fostering corporate entrepreneurship (CE) and innovation in firms, as it enables engagement in CE processes and innovative activities (Hornsby et al., 2002; Sykes & Block, 1989). Managers are encouraged to allocate their available time to tasks that are most critical to their roles, with first-line managers focusing on specific, conforming activities, while senior managers have a broader scope, including organizational and external environment scanning (Floyd &

Lane, 2000; Hornsby et al., 2009). Adequate time is essential for promoting and developing new, innovative ideas (Kreiser et al., 2021; Kuratko et al., 2005).

## **2.4.2 Process**

### **Entrepreneurial Behaviour**

CE embodies established firms' entrepreneurial behaviors (EB) and activities crucial to the business' transformation, growth, and performance (Simsek et al., 2007; Zahra, 1996). EB involves discovering, evaluating, and exploiting opportunities, with top management support being essential for fostering an entrepreneurial environment within organizations and providing necessary resources (Hornsby et al., 2002; Ireland et al., 2009), where effectiveness depends on the top management team's human capital and knowledge integration skills (De Clercq et al., 2010; Heavey & Simsek, 2013). Organizational commitment at all levels is crucial, as managerial actions vary from strategic direction at the top to execution at the operational level (Floyd & Lane, 2000; Kuratko et al., 2021). More than others, four papers highlighted how spatial, business, industry, institutional, and organizational contexts influence EB and CE activities. Turro et al. (2016) showed that a region's economic development affects CE through spatial factors, including resources, market opportunities, and collaboration, which are crucial for innovation. Tang et al. (2017) finds that cultural and competitive dynamics in regions such as China shape CE approaches, extending the spatial context to cultural norms and market conditions. Azulay et al. (2002) examine the defence industry's shift to civilian markets and find that industry trends and regional developments interact, influencing entrepreneurial strategies. Soleimanof et al. (2019) explore how family firms' governance and values impact CE, highlighting the role of family ownership in shaping entrepreneurial priorities and practices.

### **Corporate strategy**

Strategy is an organizational-level driver of CE. By pursuing entrepreneurial strategies, firms can recognize and exploit entrepreneurial opportunities (Ireland et al., 2009). Therefore, identifying and creating strategic opportunities is crucial for developing CE (Ben Arfi & Hikkerova, 2021). The corporate strategy dimension of the proposed model includes strategic alliances, networks, orientation, and adaptation. Quite surprisingly, our expectation of finding a substantial number of studies focused on describing the business,

spatial, social, and institutional contexts was not met, and only a few studies substantially contributed to the effort of contextualizing CE (e.g., Doh & Pearce, 2004; Plambeck, 2012; Thorgren et al., 2012; Yiu et al., 2007; Yiu & Lau, 2008).

***Strategic alliances:*** Strategic alliances are key to enhancing CE by bridging resource gaps and granting access to essential assets, competencies, and capabilities for innovation (Hoskisson et al., 2011; Teng, 2007; Yiu & Lau, 2008). These alliances allow firms to combine resources uniquely, share risks, and foster innovation, especially when adapting to technological shifts (Doh & Pearce, 2004; Stopford & Baden-Fuller, 1994; Teng, 2007). Yiu & Lau (2008) and Doh & Pearce (2004) emphasize the importance of business, social, and institutional contexts in forming strategic alliances for CE, showing that in emerging markets, alliances are crucial for resource acquisition and strategic renewal, with social networks playing a vital role in gaining resources and legitimacy. Doh & Pearce also note how public policy changes necessitate strategic adaptation of alliances for success. These insights underline strategic alliances' reliance on complex contexts for resource accessibility and strategic flexibility in response to policy shifts.

***Strategic networks:*** Similarly to strategic alliances, strategic networks offer firms the opportunity to gather and merge resources, enhancing their CE activities (Thorgren et al., 2012; Yiu et al. 2007). Strategic networks support CE by facilitating resource accumulation and providing a platform for sharing and recombining information, skills, and resources; fostering innovation; reducing costs; and distributing risks. Strategic networks are deeply embedded in a social context that influences their effectiveness in supporting CE (Thorgren et al., 2012; Yiu et al., 2007). The role of social context—in terms of relational capital, partner fit, interdependence, and the leveraging of home country networks—emerges as a critical factor in realizing the full potential of strategic networks for CE.

***Strategic orientation:*** A strategic orientation is important for implementing a CE, guiding firms to develop new competencies and adapt to new information and knowledge to engage in innovative activities (Bruneel et al., 2022; Naldi et al., 2015; Plambeck, 2012). Strategic orientation includes decisions about the firm's product range, the markets served, and competitive strategies (Naldi et al., 2015). Plambeck (2012) provides evidence of the crucial influence of organizational context on a firm's strategic orientation, emphasizing that managerial interpretation of contextual changes plays a key role in driving product innovativeness. This work underlines the importance of cognitive processes in strategic

formulation, demonstrating how the perceptions and responses of managers to external shifts can significantly shape innovation outcomes within firms.

### **Human resource management**

HRM integrates HR functions with strategic organizational goals to boost performance and foster a culture of innovation and flexibility (Morris et al., 2008). Corporate entrepreneurship (CE) demands specific knowledge, skills, and abilities for organizational effectiveness, necessitating HR systems that incentivize innovation and entrepreneurial behavior. Key aspects include focusing on human capital, rewards and compensation, training and development, and the formalization of supportive policies and procedures (Kim et al., 2021). We observe that the effect of context on CE has been better captured in HRM than in other reviewed categories. In particular, the discussion of the organization context provided the most interesting insights (e.g., Adachi & Hisada, 2017; Guerrero et al., 2021; Hayton, 2003; Schmelter et al., 2010; Wang et al., 2022).

***Human capital:*** Pursuing entrepreneurial opportunities requires diverse and qualified human capital (Guerrero et al., 2021; Ireland et al., 2009). Teams with varied tenure offer a wider range of skills and experiences beneficial for CE, while the internationalization of management teams enhances R&D and innovation performance through diverse work experiences and national backgrounds (Belderbos et al., 2022; Floyd & Lane, 2000). Large firms benefit from access to heterogeneous human capital, enabling specialization in various entrepreneurial processes (Barney et al., 2018; Bojica & Fuentes, 2012). Top management's knowledge, experience, and cognitive abilities are critical for identifying entrepreneurial opportunities and proactively engaging in CE activities (Heavey & Simsek, 2013; Simsek & Heavey, 2011). In this context, Guerrero et al. (2021) and Wang et al. (2022) investigate the influence of organizational and social contexts on an organization's human capital. Furthermore, looking at the ownership context, Wang et al. (2022) analyse the influence of ownership patterns (state vs. private, concentration of ownership) on HR activities.

***Rewards and compensation:*** Reward systems are among the most effective approaches for promoting CE and innovation (Block & Ornat, 1987; Brazeal, 1993). Both financial and nonfinancial incentives are key strategic tools for encouraging risk-taking and innovative motivation among employees (Marvel et al., 2007; Schmelter et al., 2010). The entrepreneurial engagement of managers is influenced by the nature of their incentives,

with short-term rewards potentially deterring and long-term evaluations promoting CE (Jones & Butler, 1992; Ling et al., 2008). Additionally, competitive compensation is crucial for CE success and individual contributions to innovation (Croucher & Rizov, 2011; Hyton, 2003). Understanding the role of the social context, including factors such as gender and employment status (Adachi & Hisada, 2017), as well as spatial and institutional contexts, such as those seen in the Russian labor market's adaptation to macroeconomic and political changes (Croucher & Rizov, 2011), allows us to better recognize the need for adaptive and inclusive reward systems to effectively motivate and engage a diverse workforce in entrepreneurial initiatives.

***Training and development:*** Training and development practices are key to fostering entrepreneurial behavior and enhancing employee engagement in CE activities (Hornsby et al., 2002; Morris et al., 2008). Training is essential for companies to initiate CE, develop employees as valuable resources, and provide motivation through learning opportunities (Kim et al., 2021; Kuratko et al., 1990). Indeed, effective training programs mitigate the risk of inappropriate behaviors and build the capabilities essential for CE. Thus, targeted training and development programs focusing on implementing new ideas or acquiring resources for entrepreneurial projects are crucial for boosting CE (Chirico et al., 2021; Schmelter et al., 2010). Chirico et al. (2021) and Schmelter et al. (2010) emphasize the impact of the organization and ownership context on the effectiveness of training and development practices in fostering CE. They argue that businesses' unique cultural and operational dynamics influence the design and implementation of training programs, affecting their ability to enhance CE dimensions such as innovativeness and risk-taking. This suggests that training programs should be tailored to fit the specific ownership and organizational contexts to cultivate an entrepreneurial culture effectively.

***Policies and procedures:*** Policies and procedures promoting participation, open communication, and collaboration significantly contribute to CE success (Hornsby et al., 2002; Kim et al., 2021). It is suggested that revising and updating policies and practices to reflect new insights can enhance innovation (Simsek & Heavey, 2011). However, overly restrictive policies may hinder entrepreneurial behavior and innovation by imposing excessive regulation on individuals. Traditional HR practices, such as detailed job descriptions and manuals, might also limit innovative activities (Kim et al., 2021). Firms are advised to consider the impact of such policies on entrepreneurial behavior when formulating their procedures.

### **2.4.3 Output**

#### **Corporate entrepreneurship**

Research has positioned CE as a strategy for revitalizing large, established firms, conceptualizing them as firm-level activities focused on discovering and pursuing new opportunities through innovation, venturing, and renewal (Kelley et al., 2009; Phan et al., 2009). CE involves concrete entrepreneurial behaviors and activities, acting upon identified opportunities. The outcomes of CE include corporate venturing, strategic renewal, and innovation, which are essential for organizational growth and adaptation (Guth & Ginsberg, 1990; Simsek et al., 2007; Zahra, 1995). Discussing the role of context, two articles are particularly interesting because of the effort made in capturing such dimensions. Morris et al. (1994) capture aspects related to the organizational and institutional context, highlighting the impact of cultural orientation (individualism vs. collectivism) on entrepreneurial activities within firms and suggesting that the societal and national cultural context influence the effectiveness of CE strategies. Minola et al. (2016) delve into the social and ownership context, examining how the lifecycle of the enterprising family affects CE motivation and activities.

#### **Corporate venturing**

Corporate venturing (CV) involves the creation of new businesses within existing or new fields, serving as both an entrepreneurial effort and a strategy for business development (Sharma & Chrisman, 1999; Zahra, 1995). It allows parent companies to explore new opportunities or leverage existing assets, renewing and enhancing strategic and financial performance (Benson & Ziedonis, 2009; Covin & Miles, 2007). CV can be classified as either internal, with ventures created within the organization, or external, involving ventures positioned outside the organization, each with distinct implications for business strategy and organizational growth (Basu & Wadhwa, 2013; Corbett et al., 2013). Social and ownership context, particularly in family-owned businesses, significantly influence CV. For instance, two papers, Marchisio et al. (2010) and Riar et al. (2022), explore how CV activities affect family cohesion and the development of individual family members. This perspective highlights the intertwining of personal relationships and business strategies in family-owned enterprises, suggesting that CV can serve as a family development and cohesion mechanism.

***Internal corporate venturing (ICV):*** Internal corporate venturing (ICV) is the process in which new businesses are established within the existing corporate structure, leveraging the firm's current resources and capabilities (Covin & Miles, 2007; Kuratko et al., 2021). ICV is an entrepreneurial initiative that stimulates growth and profitability through high-risk investments, knowledge acquisition, and capability development (Garrett & Covin, 2015; Husted & Vintergard, 2004). Successful ICV requires adjusting resource configurations and enhancing employees' abilities to identify new venture opportunities (Kacperczyk, 2012; McGrath et al., 1994). Moreover, aligning ICV with organizational strategy is critical for revitalizing firms through new business activities. However, compared with traditional activities, devoting to operational modes, reward systems, and organizational structures is necessary (Burger et al., 2009; Parker, 2011). The internal dynamics, decision-making processes, and entrepreneurial spirit within organizations, such as those observed within Toshiba, play crucial roles in leading to innovation in corporate venturing (Abetti, 1997). A focus on the organizational context underscores the importance of the internal environment in fostering or hindering the development and success of new ventures.

***External corporate venturing (ECV):*** ECV is the process in which corporations invest in or acquire new businesses initiated by external parties (Covin & Miles, 2007; Keil, 2004). ECV allows firms to access new knowledge, exploit opportunities, and establish valuable partnerships during periods of technological change (Keil et al., 2008; Ramirez-Pasillas et al., 2021). It can significantly alter or expand a firm's technological direction and provide insights into novel opportunities (Basu & Wadhwa, 2013). Additionally, in this case, we found in the family business literature a strong example of how a deeper assessment of the firm's context can provide opportunities for a better understanding of CE activities. Joint consideration of social, organizational, and ownership contexts allows us to bridge important aspects, as in Prügl & Spitzley (2020). Family dynamics and communication are crucial in determining openness to digital ventures, with family governance and innovation strategies intersecting to either support or impede digital engagement. Additionally, the family's identity, values, and vision shape the firm's digital transformation approach, influencing strategies for investing in or acquiring digital ventures. The various investment modes in ECV include corporate venture capital (CVC), acquisitions, and joint ventures (JVs), each offering different strategic benefits and avenues for growth.

**Corporate venture capital (CVC):** CVC enables established firms to connect with entrepreneurial firms and venture capitalists, fostering their development (Basu & Wadhwa, 2013; Benson & Ziedonis, 2009). These firms can access external technologies and valuable knowledge resources (Cabral et al., 2021; Titus et al., 2017). Corporations can venture into new technologies and markets through CVC investments, enhance existing competencies, and refine their products and business models, contributing to their strategic growth and innovation (Basu & Wadhwa, 2013; Danneels & Miller, 2023). According to our review of the literature, we did not find any notable study that contributed to contextualizing CVC.

**Acquisitions:** Acquisitions are identified as a key strategy for ECV, allowing established firms to renew and enhance their capabilities and resources (Agarwal & Helfat, 2009; Hunt et al., 2019). They enable firms to develop pioneering technologies, speed up new product launches, broaden product lines, and boost technological skills (Titus et al., 2017). Corporate spin-ins, a specific form of acquisition involving firms started by former employees, play a significant role in CE by enabling companies to capitalize on existing relationships for improved CE outcomes (Benson & Ziedonis, 2009; Hunt et al., 2019). While we can find in the M&A literature studies that shed light on the role of the six dimensions of context (e.g., Tarba et al., 2020; Yahiaoui et al., 2016), when focusing on their impact on CE, we did not find any study matching our expectations.

**Joint ventures (JV):** JV involves two firms collaboratively establishing a new entity, sharing ownership risks (Keil et al., 2008; Titus et al., 2020). This arrangement creates a separate entity that mitigates opportunism and promotes knowledge transfer. Joint ventures uniquely blend knowledge access with risk distribution for CE particularly under conditions of environmental uncertainty (Titus et al., 2017). We did not identify any paper contextualizing JV in the CE.

### **Strategic renewal**

Strategic renewal is an outcome of CE that reflects how a firm revitalizes its operations by changing its business scope and competitive approaches (Floyd & Lane, 2000; Guth & Ginsberg, 1990; Zahra, 1996) and capturing new product-market opportunities (Dess et al. 2003; Guth & Ginsberg 1990). As an output of CE, strategic renewal commonly entails changes in a firm's core businesses, reorganization of structure, reconfigurations of technology and business models, and strategic repositioning. Nonetheless, we found very

little attention devoted to exploring the role of context in strategic renewal activities in the reviewed papers.

***Changes in firms' core businesses:*** Firm renewal initiatives typically result in reconfiguring existing businesses and a strategic shift toward new, unfamiliar business areas (Basu & Wadhwa, 2013; Crossan & Berdrow, 2003). This process may involve fundamental and discontinuous strategic renewal, changing the core product-market domains of firms (Floyd and Lane, 2000; Huff et al., 1992). Given the high risks associated with such strategic shifts, the dynamics of renewals that involve moving away from core businesses necessitate deeper understanding.

***Reorganization of structure:*** Strategic renewal stimulates innovation and venturing through developing or adopting new structures (Zahra, 1993). This process involves redefining the firm's mission and reallocating resources to foster new product and technology combinations (Guth & Ginsberg, 1990). Effective renewal may require reorganizing procedures to enhance communication and establish systems that support innovation (Zahra, 1993).

***Business model redesign:*** Strategic renewal involves fundamental changes in a firm's competition methods, such as business models, technologies, and structures, and includes incremental adjustments within existing businesses (Agarwal & Helfat, 2009; Basu & Wadhwa, 2013; Huff et al., 1992). An illustrative example of this can be seen in the business context of the tennis racket industry, as analysed by Kim & Pennings (2009). Their study focused on how innovation drives strategic renewal in mature markets, emphasizing the critical role of product innovation in maintaining a competitive market position.

***Strategic repositioning:*** Strategic repositioning is the process that existing firms undertake to move into entirely new competitive spaces and strategic positions (Ireland et al., 2009; Stopford & Baden-Fuller, 1994). As a consequence, strategic repositioning can change the relationships among competitors in an industry by strategically positioning firms within newly defined competitive spaces (Ireland et al., 2009; Stopford & Baden-Fuller, 1994). Realizing strategic repositioning by exploiting entrepreneurial opportunities consists of a change in the competitive landscape (Ireland et al., 2009). Nonetheless, while we can see clear opportunities for deepening the role of context in strategic repositioning, we currently observe a clear gap in the literature.

## **Innovation**

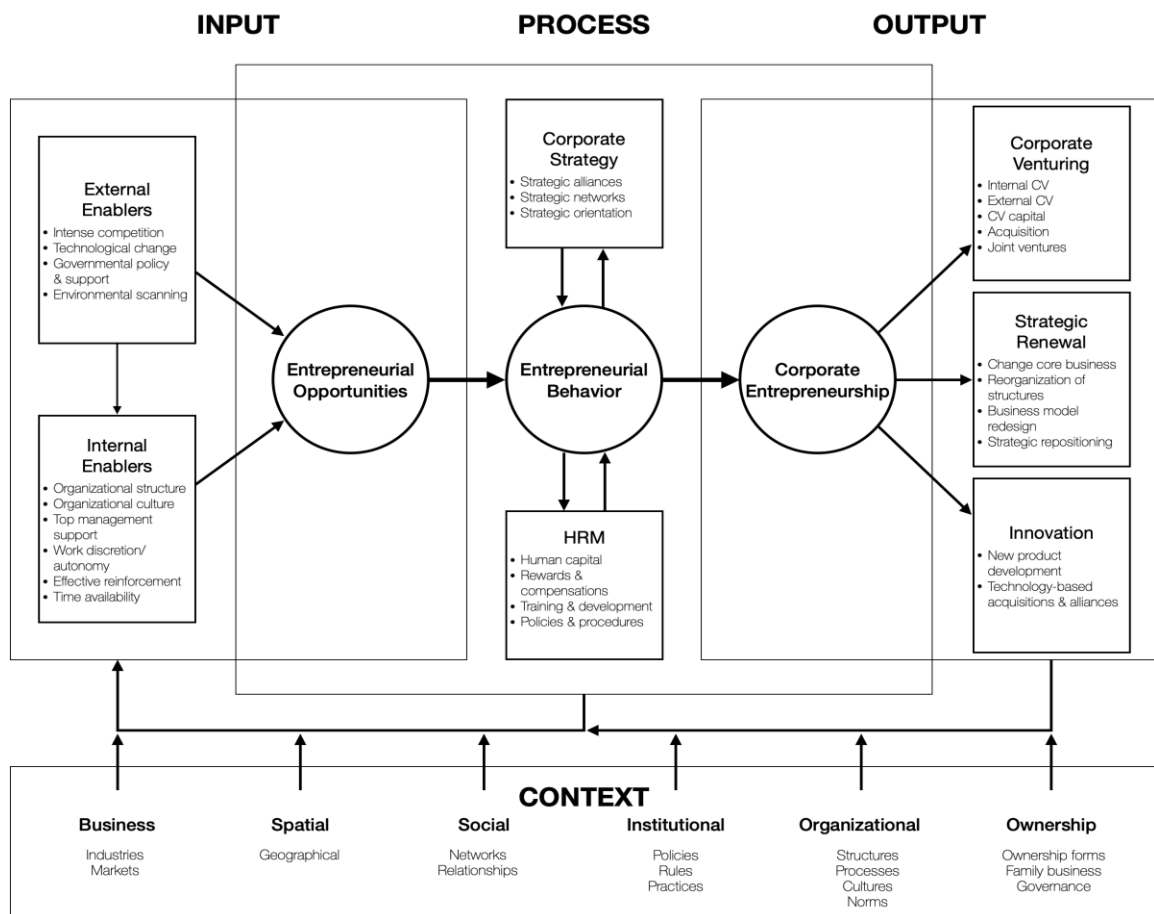
Innovation reflects a firm's commitment to creating and introducing new products, processes, and organizational systems or methods that offer growth opportunities, enhance the performance of organizations and create sustainable competitive advantages (Ben Arfi & Hikkrova, 2021; Lumpkin & Dess, 1996; Teng, 2007; Zahra, 1996; Zahra and Covin, 1995). In this regard, established firms are more likely to pursue opportunities for innovation due to their ability to access more internal knowledge and assets (Stam, 2013). However, firms must create a conducive environment that enhances the participation and collaboration of employees for effective innovation performance (Knox & Martin-Cadavid, 2022; Wang et al., 2010). As an output of CE, innovation commonly entails new product innovation, technology-based acquisition, and alliances. Examining the role of context, we found particular attention devoted to considering the business context (e.g., Dunlap-Hinkler et al., 2010; Kim & Pennings, 2009; Molloy et al., 2020), the institutional context (e.g., Camelo-Ordaz et al., 2012; Molloy et al., 2020), and the organizational context (e.g., Boone et al., 2019; Plambeck, 2012; Wang et al., 2010).

***New product development:*** Product innovation, seen as the output of corporate entrepreneurial action, is crucial for firms to gain competitive advantages and improve performance. Introducing many novel products can reshape competition or gain a competitive advantage in an industry and help create a new market (Plambeck, 2012). Moreover, firms with a high level of CE are characterized by extensive and frequent product development or improvement, which can enhance their capacity to perform well in product innovation or development (Chen et al., 2014).

***Technology-based acquisitions and alliances:*** Firms can enhance innovation performance by adopting external knowledge-sourcing strategies such as technology-based acquisitions and alliances, which expand their knowledge base and open up new technological opportunities. These strategies provide resources, enhanced market power, and strategic renewal and facilitate cross-fertilization and recombination, leading to new inventions and improved product and process performance (Boone et al., 2019; Graebner et al., 2010).

## 2.5 Extended Model

**Figure 2.3** and **Table 2.2** present the results of our systematic analysis of the literature of CE. Mapping CE in three phases of input (i.e., entrepreneurial opportunities, external enablers, internal enablers), process (i.e., entrepreneurial behavior, corporate strategy, human resource management), and output (i.e., corporate entrepreneurship, corporate venturing, strategic renewal, innovation) allowed us to better capture the complexity of CE and recognize the level of attention devoted to its contextualization in previous studies. Our systematic search and interpretation allowed us to identify 42 papers, from the total of 214 papers considered in this review, that contributed to advancing our understanding of the role of context in CE. We present these articles in **Table 2.3**. However, this process reveals how the role of context in CE remains the major gap in the literature, awaiting further exploration and future research. Moving forward, we devote the next chapter of this paper to developing a research framework for investigating the role of context in CE, building on the contributions we have identified and linking insights from the general management literature.



**FIGURE 2.3** – Expanded model

Main topics	Sub-topics	Significant contributions
Entrepreneurial opportunities		(Barney et al., 2018; Bloodgood et al., 2015; De Clercq et al., 2010; Dragan et al., 2022; Heavey & Simsek, 2013; Hoskisson et al., 2011; Ireland et al. 2009; Kollmann & Stöckmann, 2014; Ren & Guo, 2011; Rigtering et al., 2019; Turro et al., 2016; Zahra, 1996; Zahra et al., 2009; An et al. 2018).
External enablers	<i>Intense competition</i>	(Antoncic & Hisrich, 2001; Basu & Wadhwa, 2013; Burgers & Covin, 2016; Chen et al., 2014; Ireland et al., 2009; Hinz & Ingerfurth, 2013; Karmmerlander et al., 2015; Nielson et al., 1985; Romero-Martinez et al., 2010; Stopford & Baden-Fuller, 1994; Yiu & Lau, 2008; Zahra, 1991, 1993; Zahra & Covin, 1995).
	<i>Technological change</i>	(Agarwal & Helfat, 2009; Ahuja & Lampert, 2001; Basu & Wadhwa, 2013; Boone et al., 2019; Keil et al., 2008; Kellermanns & Eddleston, 2006; Titus et al., 2017; Zahra, 1993, 1996; Zahra & Covin, 1995; Zahra et al., 2000).
	<i>Government policy and support</i>	(Doh & Pearce, 2004; Fini & Toschi, 2016; Garrido et al., 2021; Heavey & Simsek, 2013; Holmes et al., 2016; Ruiz et al., 2023; Shu et al., 2019; Smith, 2014; Vanacker et al., 2021; Yiu & Lau, 2008).
	<i>Environmental scanning</i>	(Antoncic & Hisrich, 2001; Barringer & Bluedorn, 1999; Cestino et al., in press; Simsek et al., 2007; Zahra, 1991).
Internal enablers	<i>Organizational structure</i>	(Antoncic & Hisrich, 2001; Brazeal, 1993; De Massis, 2021; Hornsby et al., 2002; Ireland et al., 2009; Kuratko et al., 1990; Ling et al., 2008; Marvel et al., 2007; Nason et al., 2015; Russell & Russell, 1992; Zahra, 1993).
	<i>Organizational culture</i>	(Fayolle et al., 2010; Fulop, 1991; Hornsby et al., 2002; Ireland et al., 2009; Kuratko et al., 2005; Raitis et al., 2021; Sykes & Block, 1989; Zhang & Jia, 2010).
	<i>Top management support</i>	(Biniari, 2012; Chen & Nadkarni, 2017; Crawford & Krieser, 2015; Hornsby et al., 2002; Hornsby et al., 2009; Hughes & Mustafa, 2017; Lee et al., 2019; Ling et al., 2008; Kuratko et al., 2005; Kuratko et al., 2021; Kwee et al., 2011; Pearce et al., 1997; Shimizu, 2012; Sykes & Block, 1989; Yuan et al., 2017).
	<i>Work discretion/ autonomy</i>	(Floyd & Lane 2000; Hornsby et al., 2002; Hornsby et al., 2009; Hughes & Mustafa, 2017; Kuratko et al., 2005; Meynhardt & Diefenbach, 2012; Shimizu, 2012).
	<i>Effective reinforcement</i>	(Block & Ornati, 1987; Hornsby et al., 2002; Hornsby et al., 2009; Hughes & Mustafa, 2017; Kreiser et al., 2021; Meynhardt & Diefenbach, 2012; Sykes & Block, 1989).
	<i>Time availability</i>	(Floyd & Lane, 2000; Hornsby et al., 2002; Hornsby et al., 2009; Hughes & Mustafa, 2017; Kreiser et al., 2021; Kuratko et al., 2005; Sykes & Block, 1989).
Entrepreneurial behavior		(Azulay et al., 2002; Covin & Lumpkin, 2011; De Clercq et al., 2010; Douglas & Fitzsimmons, 2013; Elert & Stenkula, 2022; Fini et al., 2012; Floyd and Lane, 2000; Garrett & Holland, 2015; Hornsby et al., 2002; Hornsby et al., 2009; Heavey & Simsek, 2013; Ireland et al., 2009; Kuratko et al., 2005; Kuratko et al. 2015; Kuratko et al., 2021; Kuratko & Audretsch, 2009; Ling et al., 2008; Martiarena, 2013; Pearce et al., 1997; Razavi & Aziz, 2017; Simsek et al., 2007; Soleimanof et al., 2019; Tang et al., 2017; Turro et al., 2020; Urban & Moloi, 2022; Wales et al., 2013; Zahra, 1996, 2015).
Corporate strategy	<i>Strategic alliances</i>	(Doh & Pearce, 2004; Hoskisson et al., 2011; Stopford & Baden-Fuller, 1994; Teng, 2007; Yiu & Lau, 2008).
	<i>Strategic networks</i>	(Thorgren et al., 2012; Turner & Pennington, 2015; Yiu et al., 2007; Yiu & Lau, 2008).
	<i>Strategic orientation</i>	(Bruneel et al., 2022; Naldi et al., 2015; Plambeck, 2012).
Human resource management	<i>Human capital</i>	(Barney et al., 2018; Belderbos et al., 2022; Bojica et al., 2017; Bojica & Fuentes, 2012; Dalziel et al., 2011; Floyd & Lane, 2000; Guerrero et al., 2021; Hayton & Kelley, 2006; Heavey & Simsek, 2013; Ireland et al. 2009; Kim et al., 2021; Lengnick-Hall, 1992; Parker, 2011; Post et al., 2022; Simsek & Heavey, 2011; Scarpellini et al., 2017; Schleppehorst et al., 2020; Schmelter et al., 2010; Wang et al., 2022; Williams et al., 2017).
	<i>Reward and compensation</i>	(Adachi & Hisada, 2017; Brazeal, 1993; Block and Omati, 1987; Croucher & Rizov, 2011; Hayton, 2003; Jones & Butler, 1992; Kim et al., 2021; Ling et

	al., 2008; Marvel et al., 2007; Monsen et al., 2010; Poskela & Martinsuo, 2009; <i>Schmelter et al., 2010</i> ; Sykes, 1992; Wang et al., 2015).
<i>Training and development</i>	(Byrne et al., 2016; <i>Chirico et al., 2021</i> ; Hornsby et al., 2002; Kim et al., 2021; Kuratko et al., 1990; <i>Schmelter et al., 2010</i> ; Shepherd et al., 2013).
<i>Policies and procedures</i>	(Courpasson et al., 2016; Haar & White, 2013; Hornsby et al., 2002; Kim et al., 2021; Simsek & Heavey, 2011).
<b>Corporate entrepreneurship</b>	(Bierwerth et al., 2015; Chin et al., 2021; Corbett et al., 2013; Fang et al., 2021; Heavey et al., 2009; Hornsby et al., 2013; Ireland et al., 2009; Jennings & Lumpkin, 1989; Lampe et al., 2020; <i>Minola et al., 2021</i> ; <i>Morris et al., 1994</i> ; Phan et al., 2009; Randolph et al., 2019; Shimizu, 2012; Stopford & Baden-Fuller, 1994; Urbano et al., 2022; Zahra & Covin, 1995; Zahra, 1996).
<b>Corporate venturing</b>	( <i>Abetti, 1997</i> ; Biniari et al., 2015; Covin & Miles, 2007; Desarbo et al., 1987; Hill & Birkinshaw, 2008; Hill & Birkinshaw, 2014; Hoy, 2006; Hussinger et al., 2018; MacMillan & Day, 1987; <i>Marchisio et al., 2010</i> ; McDougall et al., 1992; Miller et al., 1991; Minola et al., 2016; Narayanan et al., 2009; Ohe et al., 1992; Parhankangas & Arenius, 2003; Tsai et al., 1991; Zahra, 1995; Zhang & Biniari, 2021).
<i>Internal corporate venturing</i>	(Brumana et al., 2017; Burger et al., 2009; Covin et al., 2015; Covin et al., 2018; Covin et al., 2021; Garrett & Covin, 2015; Garud & Van de Ven, 1992; Husted & Vintergard, 2004; Johnson, 2012; Kacperczyk, 2012; Keil et al., 2009; Kuratko, Morris, & Schindehutte, 2015; McGrath et al., 1994; McGrath, 1995; Miller et al., 1988; Miller et al., 1989; Parker, 2011; <i>Riar et al., 2021</i> ; Williams et al., 1991).
<i>External corporate venturing</i>	(Basu & Wadhwa, 2013; Cirillo et al., 2014; Keil, 2004; Keil et al., 2008; <i>Prügl &amp; Spitzley, 2021</i> ; <i>Ramirez-Pasillas et al., 2021</i> ; Singla & Levasseur, 2022; Titus et al., 2017).
<i>Corporate venture capital</i>	(Bendig et al., 2023; Benson & Ziedonis, 2009; Basu & Wadhwa, 2013; Cabral et al., 2021; Chen et al., 2023; Danneels & Miller, 2023; Keil, 2004; Keil et al., 2008; Siegel et al., 1988; Titus et al., 2017).
<i>Acquisitions</i>	(Agarwal & Helfat, 2009; Benson & Ziedonis, 2009; Hunt et al., 2009; Kiessling et al., 2012; Titus et al., 2017).
<i>Joint ventures</i>	(Keil et al., 2008; Titus et al., 2020).
<b>Strategic renewal</b>	(Canals, 2013; Capron & Mitchell, 2009; Dess et al. 2003; Glaser et al., 2015; Herbane, 2019; Kearney & Morris, 2015; <i>Kim &amp; Pennings, 2009</i> ; Poskela & Martinsuo, 2009; Pettit & Crossan, 2020; Post et al., 2022; Zahra, 1996).
<i>Changes in firm's core businesses</i>	(Basu & Wadhwa, 2013; Crossan & Berdrow, 2003; Floyd and Lane, 2000; Huff et al., 1992).
<i>Reorganization of structure</i>	(Guth & Ginsberg 1990; Zahra, 1993).
<i>Reorganization of technology and business model</i>	(Agarwal & Helfat, 2009; Basu & Wadhwa, 2013; Cucculelli & Bettinelli, 2015; Huff et al., 1992).
<i>Strategic repositioning</i>	(Ireland et al., 2009; Stopford & Baden-Fuller, 1994).
<b>Innovation</b>	(Ben Arfi & Hikkrova, 2021; Braunerhjelm et al., 2018; <i>Camelo-Ordaz et al., 2012</i> ; Hale & Woronkovic, 2021; Lumpkin & Dess, 1996; <i>Kelley et al., 2009</i> ; <i>Kim &amp; Pennings, 2009</i> ; Knox & Marin-Cadavid, 2022; <i>Molloy et al., 2020</i> ; Stam, 2013; Teng, 2007; Wang et al., 2010; Zahra, 1996; Zahra and Covin, 1995).
<i>New product innovation</i>	(Chen et al., 2014; <i>Dunlap-Hinkler et al., 2010</i> ; Ireland et al., 2009; <i>Plambeck, 2012</i> ).
<i>Technology-based acquisition and alliance</i>	( <i>Boone et al., 2019</i> ; Graebner et al., 2010; <i>Wang et al., 2010</i> ).

Note: Papers that have been singled out for their contribution to contextualizing CE are indicated *in italics* in the table.

**TABLE 2.2 – Articles per group**

## 2.6 Research Agenda and Conclusions

### 2.6.1 Contextualizing corporate entrepreneurship

Our review shows that the extant literature has emphasized the antecedents, processes, and outcomes of CE. Prior research has linked firms' CE to sustainable competitive advantages that can be a foundation for profitable growth (Hornsby et al. 2009; Kuratko et al. 2005). In addition, it has been found that CE is a multifaceted phenomenon requiring human capital to explore and exploit entrepreneurial opportunities. However, there is little systematic knowledge of the different forms and activities of CE in context. Understanding context is important for understanding the situations under which entrepreneurship occurs, how and why it arises, and who becomes involved (Welter, 2011). Furthermore, context incorporates a range of dimensions that vary in terms of the level of analysis and domain, requiring consideration of the heterogeneity of contexts in using and developing theories and methodologies (Bruton et al., 2022; Filatotchev et al., 2022; Zahra & Wright, 2011). Therefore, understanding the different contextual influences across CE activities is important for advancing the theoretical perspectives and frameworks of the research field (Zahra, 2015). Previous research has emphasized ownership less, even though it is fundamental to firm strategy and economic function (Foss et al., 2021). We highlight the need to add ownership as a contextual dimension of the literature of CE. Ownership control allows owners to utilize resources in new ways, acquire and sell them, invest in them, or recombine them based on their beliefs (Foss et al., 2021).

This paper has suggested contextualizing an input-process-output model of CE whereby internal and external enablers help firms explore and exploit entrepreneurial opportunities for CE activities. Thus, the conceptual model, organized based on previous research, has allowed us to identify gaps emerging from our literature review. In the following sections, we discuss a future research agenda for CE on the contextual dimensions of *business, spatial, social, institutional, organizational, and ownership*. An overview of the proposed contextual dimensions, identified research gaps, and corresponding research questions are displayed in **Table 2.4**.

	<b>Business context</b>	<b>Spatial context</b>	<b>Social context</b>	<b>Institutional context</b>	<b>Organizational context</b>	<b>Ownership context</b>
Entrepreneurial opportunities	–	Turro et al., 2016	–	–	–	–
External enablers	Cestino et al., in press; Yiu & Lau, 2008	–	Cestino et al., in press; Yiu & Lau, 2008	Doh & Pearce, 2004; Vanacker et al., 2021	Boone et al., 2019; Romero-Martinez et al., 2010	Romero-Martinez et al., 2010
Internal enablers	Hughes & Mustafa, 2017	Fayolle et al., 2010	Biniari, 2012; Lee et al., 2019; Raitis et al., 2021	Hughes & Mustafa, 2017; Meynhardt & Diefenbach, 2012	Fayolle et al., 2010; Nason et al., 2015	De Massis et al., 2021; Lee et al., 2019; Meynhardt & Diefenbach, 2012; Raitis et al., 2021
Entrepreneurial behavior	Azulay et al., 2002	Turro et al., 2016; Tang et al., 2017	–	Soleimanof et al., 2019	Fini et al., 2012; Tang et al., 2017	Soleimanof et al., 2019
Corporate strategy	Yiu & Lau, 2008	–	Thorgren et al., 2012; Yiu et al., 2007; Yiu & Lau, 2008	Doh & Pearce, 2004	Plambeck, 2012	–
Human resource management	–	Croucher & Rizov, 2011; Wang et al., 2022	Adachi & Hisada, 2017; Wang et al., 2022	Croucher & Rizov, 2011	Adachi & Hisada, 2017; Guerrero et al., 2021; Hayton, 2003; Schmelter et al., 2010; Wang et al., 2022	Chirico et al., 2021
Corporate entrepreneurship	–	–	Morris et al., 1994	Morris et al., 1994	–	Minola et al., 2016
Corporate venturing	–	Ramirez-Pasillas et al., 2021	Abetti, 1997; Prügl & Spitzley, 2021; Ramirez-Pasillas et al., 2021	–	Marchisio et al., 2010; Prügl & Spitzley, 2020	Marchisio et al., 2010; Prügl & Spitzley, 2021; Riar et al., 2022
Strategic renewal	Kim & Pennings, 2009	–	–	–	–	–
Innovation	Dunlap-Hinkler et al., 2010; Kim & Pennings, 2009; Molloy et al., 2020	Wang et al., 2010	Kelley et al., 2009	Camelo-Ordaz et al., 2012; Molloy et al., 2020	Boone et al., 2019; Plambeck, 2012; Wang et al., 2010	–

**TABLE 2.3** – Articles contributing to contextualizing CE and related context.

<b>Context</b>	<b>Focus</b>	<b>Research gap</b>	<b>Research questions</b>
<b>Business context</b>	Industries, markets	Exploring the transition from for-profit to profit-and-purpose  Sector studies  Impact of alliances, JV, M&A, and franchising	RQ1. How can enterprises use CE for transitioning from for-profit to profit-and-purpose?  RQ2. How do purpose-driven organizations pursue their goals through CE?  RQ3. How does CE differ within and across sectors?  RQ4. How are CE activities affected by alliances, JV, M&A, and franchising?
<b>Spatial context</b>	Geographical	Regional differences  Indigenous theories  Global South	RQ5. How do the regional differences in economies affect CE activities?  RQ6. How can studies in developing countries inform theories and practices in CE?  RQ7. How can indigenous theories contribute to contextualize CE?  RQ8. How does CE unfold in different areas of the Global South?
<b>Social context</b>	Networks, relationships	Multistakeholder engagement  Sustainability and SDGs  Social entrepreneurship	RQ9. How do multistakeholder engagement affect CE activities?  RQ10. How do firms create and participate in different networks to facilitate CE activities?  RQ11. What is the role of CE in accomplishing progress towards the UN SDGs?  RQ12. What is the role of CE in stimulating social entrepreneurship?
<b>Institutional context</b>	Policies, rules, practices	Governmental policies, changes and support  Instability and weakness of institutions	RQ13. How can government policies impact on CE?  RQ14. How do changes of government policies stimulate or inhibit CE activities?  RQ15. How do political instability impact on CE?  RQ16. How do weak institutions impact on CE?
<b>Organizational context</b>	Structures, processes, culture, norms	Intercultural interactions  Legacy, heritage, and resilience  HRM practices, recruitment and retention	RQ17. How do intercultural relations and communication impact on multinational CE activities?  RQ18. How do the legacy and heritage of an organization influence CE initiatives?  RQ19. How does CE develop and support organizational resilience?  RQ20. How can an organization attract, cultivate, and manage human resources to enhance CE activities?
<b>Ownership context</b>	Ownership forms, governance	Heterogeneity of ownership  Change of ownership  Public ownership	RQ21. How do different ownership forms influence CE?  RQ22. How do changes in ownership affect CE activities?

Role of the board	RQ23. How does CE unfold in the context of public sector organization?
	RQ24. How does the board of directors influence CE initiatives?

**TABLE 2.4** – Summary and examples of future research questions

***Business context***

Industries and markets are the most frequently studied contexts in previous studies. In context, industries vary in the opportunities they offer and the intensity of their competitive forces (Zahra, 2015). Yet, little attention is given to the relation between CE and the specificity of industry sectors, opening for research opportunities to contextualize CE in different business sectors. Davidsson et al. (2020) argues that “contexts moderate effects of external enabler characteristics, mechanisms, and roles.” Previous studies have shown that intense competition offers entrepreneurial opportunities for firms to pursue and engage in CE activities. Scholars have explored entrepreneurial venturing initiatives such as alliances, joint ventures, M&As, and franchising. For instance, in the previous literature, alliances and joint ventures (e.g., Yiu & Lau, 2008) are important for firms aiming to facilitate entrepreneurial behavior. However, in previous studies, little emphasis has been given to alliances and joint ventures designed to enhance CE activities. Hence, future research should examine how CE activities can be strengthened and made effective through strategic alliances and joint ventures. Additionally, recent studies have examined franchising as a unique and prevalent form of firm-level CE (Chirico et al., 2021), a novel area that needs further exploration. Hence, future research could examine the contribution of franchising to a firm’s effectiveness and study the relationship of franchising in this context as a type of CE activity.

Our review shows that most related research has focused on the use of CE for profit and growth in different industries and markets. Nonetheless, there is a general debate regarding a profit-with-purpose orientation for corporations that combines social or environmental benefits with usual profit-making motives (Levillain & Segrestin, 2019; Stubbs, 2017). Such a purpose can be used to minimize the negative impacts of a company’s activities on various stakeholders or a charitable effort to benefit a particular population (Levillain & Segrestin, 2019). For example, profit-with-purpose corporations include B-corps, foundations, cooperatives, and social enterprises. B-Corps pursue profits to create positive social, environmental, and economic outcomes (Stubbs, 2017). On the one hand, growing

profitability requirements have undermined the profit-with-purpose orientation (Levillain & Segrestin, 2019). On the other hand, research has suggested that purpose-driven companies grow more quickly and perform better in the market than other firms (George et al., 2021). In this context, purpose can be expressed regarding a company's values, social service, and environmental stewardship (George et al., 2021). Therefore, exploring how enterprises can transition from a for-profit orientation to a profit-with-purpose orientation through CE opens avenues for future research. Furthermore, future research could also explore how purpose-driven organizations pursue their goals through CE.

### *Spatial context*

The spatial dimension of context highlights the impact of geography and location on entrepreneurial firms regarding their global, national, regional, and local distribution (Welter, 2011). For example, some countries are geographically well located and benefit from the advantages of their location (Zahra, 2015). Concerning the spatial context, studies on CE have placed much emphasis on established economies. New avenues for future research await the application of CE considering regional differences in human resources, diverse economic resources, and the supply of talented and educated entrepreneurs. However, scholars have overlooked 'cultural and ideological differences in other settings', as theories developed in the United States and Europe have dominated management and organizational studies (Bruton et al., 2022: 1057). Bruton et al. (2022) suggested that scholars should develop indigenous theories recognizing the distinct nature of local contexts. Indigenous theories are context specific, recognize space and time and offer detailed insights into a given context (Bruton et al., 2022). Previous research on CE has placed little emphasis on the Global South, which refers broadly to low-income countries in Africa, Asia, and Latin America (Dados & Connell, 2012). This is unfortunate since research indicates that different mechanisms underlie the relationship between society and the economy in Global South contexts (Bruton et al., 2022), and a much greater level of symbiosis between communities and enterprises exists (Buratti et al., 2022). Thus, studying CE in emerging economies and developing countries provides an opportunity for theoretical integration and extension. For example, focusing on issues of CE in emerging economies might broaden our understanding of the intercultural and intergroup variation in how CE is constructed and enacted. The potential for indigenous entrepreneurship to inform theory on entrepreneurial behavior (Dana, 2007) and social entrepreneurship (Tapsell & Woods, 2010) is just as relevant for advancing CE. Moreover, we suggest

paying more attention to the Global South, as this would favour the exploration of the role of indigenous entrepreneurship in the CE.

### ***Social context***

The most common application of social context in entrepreneurship research is related to social network approaches. Networks can provide financial capital, information, potential employees, and client access (Welter, 2011). Networks provide opportunities for firms to accumulate and combine their resources to engage in entrepreneurial activities (Thorgren et al., 2012). However, little research has focused on how actors build social capital to strengthen CE activities through network participation. Indeed, CE initiatives involve multiple stakeholders to create additional opportunities to impact the social context. Many calls have been made for multistakeholder engagements to tackle “wicked problems” (Waddock et al., 2015) and achieve sustainable development (van Tulder & Keen, 2018). A deeper understanding of how sustainable CE can be realized through multistakeholder interactions is needed. This trajectory is important for business development and required to accelerate joint efforts to realize the United Nations Sustainable Development Goals (SDGs). Nonet et al. (2022) acknowledged the engagement of business organizations in achieving social sustainability goals. In this context, CE can be decisive in pursuing multistakeholder engagement and collaboration to achieve the SDGs (Nonet et al., 2022). The role of CE in sustainable social development is a nascent area with great potential for social contextualization in entrepreneurship research. Furthermore, there is a need for social CE in existing organizations where managers can obtain an opportunity to analyse whether the environment is supportive of corporate entrepreneurial behaviors and creates social value (Kuratko et al., 2017). Therefore, future studies can explore the role of CE in fostering and creating social value through corporate social entrepreneurship initiatives.

### ***Institutional context***

The institutional context focuses on the influence of formal and informal institutions on opportunity recognition. Formal institutions are political and economic rules that create or restrict opportunity fields for entrepreneurship (Welter, 2011). Previous studies have paid little attention to government policy changes, regulations, and support in relation to CE activities (e.g., Doh & Pearce, 2004). This situation creates avenues for future research into how government policy changes influence CE activities. In addition, future research should examine how a nation’s political instability and economic system affect CE. Stimulating

entrepreneurial activities through governmental interventions is a delicate matter that can lead to unintended negative outcomes; therefore, a better understanding of the link between policy and CE is needed (Segaro & Haag, 2022). Furthermore, we know little about the influence of cultural systems on CE activities. Acknowledging the cultural-bound nature of CE implies the need to study this topic within different institutional contexts (Centeno-Caffarena & Discua-Cruz, 2021; Dana, 2007).

### ***Organizational context***

The organizational context may vary depending on how an organization encourages or discourages entrepreneurship (Zahra, 2015). Organizational culture, values, norms, and sociocultural practices can be conducive to driving or influencing entrepreneurship (Krueger et al., 2016). Future research should address the influence of organizational culture and values on CE activities. Managers target different organizational outcomes, such as developing the organization's culture, building identity, promoting authenticity, and/or enhancing legitimacy, to produce changes in the organizational environment (Foster et al., 2017). Moreover, future studies should also address how an organization's legacy, heritage, and resilience impact CE activities (Spielmann et al., 2022). For example, an entrepreneurial legacy provides the basis for transferring entrepreneurial perspectives, skills, and capabilities across generations in family businesses (Radu-Lefebvre et al., 2020).

Surprisingly, the role of gender is a neglected phenomenon that was only recently addressed by Ruiz et al. (2023), who showed that any gender differences could be explained by the influence of country-level conditions (gender equality levels, culture, and social norms), opening significant opportunities for future studies across contexts. Moreover, an organization's CE platform is formed by individuals' knowledge, skills, and abilities (Kim et al., 2021). The recruitment, development, and retention of people skilled in CE activities are increasingly important. Understanding HR practices related to CE activities in different organizational contexts is needed to advance the field. Future research can examine how an organization can attract, cultivate, and manage human resources to enhance CE activities.

### ***Ownership context***

Previous research has placed little emphasis on the role of the ownership context in CE activities, although this context is fundamental to a firm's strategy and economic function

(Foss et al., 2021). The ownership context takes various forms for different entrepreneurial firms, such as private and listed corporations; family and nonfamily firms; firms with venture capital or private equity ownership; and those with public, single, or group ownership structures (Akhter et al., 2023; Zahra, 2015). Accounting for ownership aspects opens several research avenues. For example, additional research is needed to understand ownership heterogeneity and its impact on CE activities. Notably, a few studies have identified the importance of entrepreneurial activity in public organizations (Kearney et al. 2007; Morris & Jones, 1999), paving the way for further research on CE in this context. In addition, authors have suggested the importance of entrepreneurial activities for the improved delivery of services to users in the public sector (Walker et al. 2011). Kraus et al. (2019) also investigate the individual capability to explore and exploit entrepreneurial opportunities in existing organizations to alleviate challenges and resource constraints in the public sector. To date, however, little is known about how changes in ownership (e.g., a public company going private or undergoing family business succession) influence the entrepreneurial activities of the firm (Kuratko et al., 2014; Zahra, 2015). Accordingly, future research can address the impact of changes in ownership on CE activities in the context of public sector organizations. Furthermore, future research could address the extent to which CE differ between centralized and dispersed ownership forms.

Finally, CE is assumed to arise in private and listed corporations, but few studies have examined CE in the public sector. Therefore, there is a particular gap in publicly owned organizations involving CE, and this issue requires attention given such organizations' central role in many countries. Future studies can explore the extent of CE activities in the public sector. In addition, future research could explore the effectiveness of CE in the public sector through various entrepreneurial venturing initiatives, including strategic alliances, M&As, and joint ventures. Moreover, from a governance perspective, the board of directors is central to the corporate governance system. Nevertheless, little attention has been given to the role of boards in CE activities (e.g., Zahra, 1996). Hence, there is a need for further research on how boards are developed to enable CE through different ownership forms.

### **2.6.2 Limitations**

This literature review has limitations due to the abovementioned choices. Since CE is a mature topic with considerable research output, we decided to limit our search to top-tier

journals. In this way, we ensure that knowledge synthesis is based on rigorous research. We also decided to include only English-language articles to ensure that we could interpret the content properly, a commonly used search limitation (Blalock et al., 2023). This does not mean that high-quality contributions cannot be found in other outlets or languages but that our review is limited to our selected sample.

### **2.6.3 Concluding remarks**

A large body of research has examined the nature and dimensions of CE as well as its construct, antecedents, and implications for firm performance (Teng, 2007; Zahra & Hayton, 2008; Zahra et al., 2000). Previous studies have also examined the internal and external factors affecting CE concerning the various outcomes of a firm (Zahra, 1991, 1993; Antoncic & Hisrich, 2001; Yiu & Lau, 2008). This paper first reviewed the enablers of entrepreneurial opportunities in existing organizations resulting in different CE activities and thereafter discussed future research suggestions about business, spatial, social, institutional, organizational, and ownership contexts. Based on our review of extant literature, we argue that there is little systematic knowledge of the different forms and activities of CE in context. Context incorporates a range of dimensions that vary in terms of the level of analysis and domain, requiring consideration of the heterogeneity of contexts in using and developing theories and methodologies (Bruton et al., 2022; Filatotchev et al., 2022; Welter, 2011; Zahra & Wright, 2011). Thus, understanding the different contextual influences across CE activities is important for advancing the theoretical perspectives and frameworks of the research field (Zahra, 2015). The conceptual model developed in this review has enabled us to identify future directions that respond to recent calls to seriously address the context of entrepreneurship research and offer a contextualized research agenda for CE.

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## CHAPTER 3: PURSUING CORPORATE ENTREPRENEURSHIP IN STATE-OWNED ENTERPRISE: INSIGHTS FROM ETHIOPIAN AIRLINES<sup>12</sup>

### ABSTRACT

#### **Objectives**

*State-owned enterprises are pillars in many developing economies. Corporate entrepreneurship is key for prosperous development but deemed extra challenging under state ownership, due to bureaucracy and politics. It is also deemed extra challenging in developing country contexts, due to scarcity of resources and infrastructure. For state-owned enterprises in developing countries, these circumstances pose a double jeopardy challenge, due to risk incurred from two sources simultaneously. Yet, overcoming these challenges can bring prosperity to communities where it is perhaps needed the most. We focus on innovation activities that support the pursuit of corporate entrepreneurship in state-owned enterprises in a developing country context by exploring the case of Ethiopian Airlines. We address how contextual dimensions (business, spatial, social, institutional, organizational, and ownership context) affect corporate entrepreneurship under those conditions.*

#### **Prior Work**

*All forms of organizations need innovation for survival and growth while entrepreneurship in existing organizations, i.e. corporate entrepreneurship, hold specific challenges. Extant research has identified the relevance of corporate entrepreneurship in state-owned enterprises for their expectation to meet the needs of its citizens while managing resource constraints. Organizations in developing countries are experiencing a rapidly changing environment and are pressured to innovate by introducing new products, services and processes. Prior research suggests that since the contextual conditions in developing countries are less supportive than those in advanced economies, we need a deeper contextualized understanding of the links between corporate entrepreneurship and innovation.*

#### **Approach**

*Due to little prior empirical insights into the developing country context and the application of corporate entrepreneurship in state-owned enterprises, a single case study approach was used since it is ideal for accentuating the context. Ethiopian Airlines is selected as the case for being one of the largest state-owned enterprises contributing to the economic growth of Ethiopia also known for their innovativeness. We conducted 22 interviews with senior directors, managers, and senior experts in business development, R&D innovation hubs and with senior officials in*

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*marketing and finance. For further understanding of the context of the case, interviews were complemented with archival company material, industry reports and other writing about the company, the industry and the institutional context.*

### **Results**

*The findings describe the input and process leading to two outcomes of innovation. Moreover, we discuss how the contextual dimensions of business, spatial, social, institutional, organizational and ownership context jointly affect the innovation outputs of corporate entrepreneurship. The first innovation output concerns converting passenger seats into cargo freighters during Covid-19. The second innovation concerns a sustainability initiative leading to collaborations with farmers' cooperatives to provide local produce instead of imported processed food in the airline.*

### **Value and Implications**

*We explored the application of corporate entrepreneurship in state-owned enterprises through innovation practices. The paper contributes by identifying and describing the influence of different contextual dimensions on the innovation output of corporate entrepreneurship. We furthermore unfold the innovation process to illustrate how innovative ideas are initiated, developed, and implemented through corporate entrepreneurship in the context of state-owned enterprises of developing countries.*

**Keywords:** Corporate entrepreneurship, innovation, developing country, state ownership, case study

## **3.1 Introduction**

State-owned enterprises contribute a significant share to the gross domestic product (GDP), employment opportunities, and growth of developing economies (Meissner et al., 2019). State-owned organizations therefore hold great potential to enable favorable progress in developing countries and constitute an important research topic towards achieving UN development goals. In developing countries, firms face tangible and intangible obstacles in developing new products and services where important resources are scarce (Gonzalez-Pernia et al., 2015). Innovation in state-owned enterprises varies across countries. Nonetheless, in developing countries, most firms tend to imitate and adapt existing innovations from developed nations to local conditions (Almeida & Fernandes, 2008); Guimón & Agapitova, 2013). Adopting innovations from developed country contexts can allow access to resources and reduces uncertainty for the acceptance of new products and services (Bradley et al., 2012). Enabling adaptations from one context to another is challenging and requires contextualized explorations.

Currently, there is a significant growing interest in innovation activities as part of corporate entrepreneurship (CE) in the public sector to confront a challenging and competitive environment (Bartlett & Dibben, 2002; Kearney & Meynhardt, 2016). Research points out that CE is closely associated with business outcomes including organizational growth and expansion, performance, and profitability (Antoncic & Hisrich, 2001; Zahra, 1991; Zahra & Covin, 1995). CE can be seen as the effort to promote innovation from an internal organizational perspective in terms of exploring new opportunities, aligning resources, exploitation, and commercialization of the opportunities (McFadzean et al., 2005). CE is a means by which firms can utilize their resources and capability to develop innovation activities for better organizational performance and productivity (Zahra, 1991; Zahra & Covin, 1995). It also facilitates firms to capitalize on their capabilities to develop creative and innovative ideas toward competitive advantage and business expansion. Moreover, CE is significant for maintaining entrepreneurial spirit through business development, revenue growth, and introducing the development of new products, services, and processes (Kuratko et al., 1990; Lumpkin & Dess 1996; Miles & Covin, 2002; Zahra & Covin, 1995).

The CE process requires a variety of knowledge for exploring different innovative ideas. The internal resources and capability of the firm play a significant role in enhancing innovation activities across the organization. In this regard, R&D has become an important factor in the innovative activities of state-owned enterprises as well as private enterprises in order to increase knowledge and the use of this knowledge to devise new applications (Guimón & Agapitova, 2013; González Álvarez & Argothy, 2019). In this paper, we focus on those innovation activities that support the pursuit of CE in state-owned enterprises of a developing country context by exploring the case of Ethiopian Airlines. The paper aims to explore the following research question:

*How does corporate entrepreneurship unfold in public sector organizations through innovation practices in a developing country context?*

We thereby address how CE activities in state-owned enterprises of developing countries can achieve purpose-driven goals and contribute to sustainable prosperity. Specifically, it addresses how innovative ideas as part of CE dimensions are initiated, developed, and implemented. The paper contributes by identifying and describing the different contextualized factors that influence R&D practices in finding creative and innovative ideas.

## **3.2 Theoretical Background**

### **3.2.1 Corporate entrepreneurship and innovation**

The concept of corporate entrepreneurship can be traced back to the 1970s. Authors use different terms across times such as intrapreneurship (Pinchot, 1985); corporate venturing (MacMillan, 1986); corporate entrepreneurship (Guth & Ginsberg, 1990; Sharma & Chrisman, 1999), internal corporate entrepreneurship (Jones & Butler, 1992); strategic entrepreneurship (Hitt et al., 2001); and entrepreneurial orientation (EO) (Lumpkin & Dess, 1996),

Zahra (1991) contends CE in terms of formal or informal activities aimed at creating new businesses in established companies through product and process innovations and market developments. Prior research suggests that CE is a process that exists inside an organization regardless of its size and leads to new business ventures and innovative activities (Antoncic & Hisrich, 2001). Ireland et al. (2009, pp. 21) defined CE as “a vision-directed, organization-wide reliance on entrepreneurial behavior that purposefully and continuously rejuvenates the organization and shapes the scope of its operations through the recognition and exploitation of entrepreneurial opportunity.” Firms with the use of CE can able to identify and exploit opportunities (Lumpkin and Dess, 1996).

CE can be used as an adaptation mechanism for organizations in a competitive environment (Lumpkin and Dess, 1996). It is also important to take advantage of entrepreneurial opportunities to develop and sustain competitiveness through the introduction of new products, services, and processes (Hornsby et al., 2002). In this regard, CE results in the successful search for entrepreneurial opportunities through combinations of internally generated new resources (Burgelman, 1983). Firms can enhance their existing capabilities and develop new ones by exploring and exploiting entrepreneurial opportunities (Ireland et al., 2009). However, the ability of firms to explore and exploit such opportunities requires and depends on the knowledge, experience, and ability of members of the organizations (Bloodgood et al., 2015; Heavey & Simsek, 2013; Ren & Guo, 2011; Turro et al., 2016).

In a highly competitive environment, firms are required to be innovative and flexible to recognize and pursue opportunities ahead of their competitors (Romero-Martinez et al., 2010; Yiu & Lau, 2008). As a result, innovation is significant for firms to change their

position in the industry and alter the competitive landscape (Kim & Pennings, 2009). Innovativeness is also a firm's tendency to engage in and support new ideas, novelty, experimentation, and creative processes that may result in new products, services, or technological processes (Lassen et al., 2006). In this regard, creativity assists in the emergence of new and novel ideas that will initiate and support the innovation process (McFadzean et al., 2005).

Moreover, firms with a strong entrepreneurial orientation tend to possess distinctive competencies and innovative outlooks (Hsu et al., 2014). Innovativeness is one of the major components in the CE studies. All forms of CE including venturing and strategic renewal entail the application of innovative activities in terms of new business creation, new structure, products, services, and processes (Covin & Miles, 1999; Kearney et al., 2008). Innovation can make changes on the past strategies of the existing firms in terms of products, markets, structures, processes, capabilities, and business models (Kuratko & Audretsch, 2013). Theoretically, there is a need to develop a better understanding of the links between CE and innovation (Ben Arif & Hikkerova, 2021; Kuratko et al., 2015). In this paper, we aim to explore the application of CE in state-owned enterprises through innovation practices. Thus, it is important to understand the mechanism through which innovation is developed and captured throughout an organization as a CE activity (Turner & Pennington, 2015).

### **3.2.2 Innovation in developing countries**

In today's competitive business, organizations need to innovate continuously and promote innovations. Innovation can be a key instrument for corporate survival and growth (Zahra & Covin, 1995). Firms in developing countries are experiencing a rapidly changing environment and are forced to improve their competitiveness by introducing new products, processes, and technologies (Wadho & Chaudhry, 2018). Firms with limited tangible resources may need a strong innovative posture to pursue new opportunities in complex and dynamic environments (Hsu et al., 2014). Innovation is relevant in developing countries through which firms can renovate activities, reconfigure resources, and change entrepreneurial attitudes that are crucial for unpredictable environments (Turro et al., 2016; Yiu & Lau, 2008). However, González-Pernía et al. (2015) suggest that the contextual conditions including markets and institutions in developing countries to launch innovations are less creative and supportive than those in advanced economies. In a developing country

context, innovation involves the adoption and possibly modification of products and technologies that might be developed elsewhere (Egbetokun et al., 2016).

Changes in the external environment are one of the reasons for existing organizations to engage in entrepreneurial initiatives (Cestino et al., 2023). Existing organizations can survive the increasingly competitive environment through innovation imperatives (Ireland et al., 2009). Prior research notes that developing countries are characterized by political and economic instability, and institutional challenges such as physical infrastructures make it difficult to engage in entrepreneurial activities (Chan & Mustafa, 2021; Yiu & Lau, 2008). It has been said that economic infrastructure is important to innovation and development. However, infrastructure networks connecting the regional integration of nations in Africa remain challenged for firms (Egbetokun et al., 2016). Furthermore, firms in developing countries face rapid institutional changes due to changes in economic climate and changes in levels of government involvement, ownership patterns, and enforcement of business laws (Urban, 2019). Besides, Urbano et al. (2019) found that the regulatory, normative, and cognitive institutional environments are significant in determining higher levels of innovativeness including risk-taking and proactiveness concerning African contexts.

Moreover, the innovation policy instruments that encourage firms to invest more in R&D activities are less effective in developing countries (Fernández-Sastre & Montalvo-Quizhpi, 2019). In those countries, innovation policy will contribute to the firm's knowledge and capabilities. Hsu et al. (2014) suggest that in the context of developing nations, investing in CE represents an important mechanism that promotes product and process innovation in firms. Furthermore, in the context of developing countries, innovation often involves the process of adopting existing technologies, copying or imitating, or adopting new managerial and organizational practices or business models from other companies (Shkabatur et al., 2022). On the other hand, the search for knowledge within and outside the countries' boundaries are important source for the innovation process in less developed countries (Aliasghar et al., 2022). Besides, innovation support programs in developing countries are important for firms to develop technological capabilities which result in engaging different entrepreneurial initiatives (Fernández-Sastre & Montalvo-Quizhpi, 2019).

### **3.2.3 Innovation in state-owned enterprises**

State-owned enterprises contribute a significant share to the Gross domestic product, employment, and market growth of developing countries. State-owned enterprises serve as an economic agent contributing 15% of the GDP of nations such as Africa, Asia, and Latin America (Gil-López et al., 2022). Prior research asserts that the government expects high from state-owned enterprises to advance technological capabilities and promote innovation, especially in developing economies (Meissner et al., 2019). Compared to private companies, state-owned enterprises in developing countries have access to organizational resources due to close ties with the government. However, state-owned enterprises have also found that they lack innovation capabilities to utilize those resources efficiently (Chang et al., 2019).

CE is relevant in state-owned enterprises as the public organization is expected to meet the needs of its citizens with constrained budgets (Gil-López et al., 2022). These require advances in technology and innovation to provide products and services for achieving both economic and social outcomes. The limited availability of budgets in the public sector makes it relevant to develop product and service innovation as part of CE (Kearney et al., 2009). Innovation in the public sector primarily is connected to the identification of new ideas for products, services, and processes to generate public or social value (Iliashenko et al., 2023). In addition, innovation in the public sector can also improve the quality of delivered services and reduce costs as well as enhance the problem-solving capacity of governmental organizations (Kearney & Meynhardt, 2016). Prior research also asserts that due to internal difficulties and environmental threats public organizations differ in their ability to implement CE (Gil-López et al., 2022).

Moreover, the institutional factors including weak legal enforcement and lack of financial independence challenge the role of state ownership from playing in state-owned enterprises, especially in emerging economies (Chang et al., 2019). The public sector is recognized as being a more complex open system and this could be a challenge for innovation (Kearney et al., 2008). According to Belloc (2014), innovation in state-owned enterprises is less efficient due to poor monitoring of managers, lack of market discipline, public managers corruption, and malevolent politician interference. Prior research also indicates that state-owned enterprises are not well competitive because of inefficiency in utilizing the available resources and lack of entrepreneurial orientations (Chang et al., 2019). CE supported with an institutional framework is crucial to enhance business activity

and economic growth (Gómez-Haro et al., 2011). In this regard, establishing supportive regulative institutional arrangements in developing economies is important to promote the growth of entrepreneurial culture in the public sector (Iliashenko et al., 2023).

### **3.3 Method**

#### **3.3.1 Research approach**

Due to little prior empirical insights into the context of Ethiopia about the application of CE in state-owned enterprises, a qualitative research approach with a single cases study design was used. The qualitative research approach is appropriate to explore and answer the why and how research questions (Yin, 2011). A qualitative case study allows the researcher to understand in depth the entrepreneurial processes and dynamics that take place in a given context (Eisenhardt, 1989; Stake, 1995). Ethiopian Airlines is selected as a single case study to explore the concept of CE through innovation practice in state-owned enterprises. We select the case by purposeful sampling (Eisenhardt, 1989), first, because Ethiopia Airlines is a state-owned enterprise in a developing country. Second, it is a company recognized for entrepreneurial and innovative activities that has made the airline internationally competitive. Third, the airline has the largest contribution to GDP and employment for its nation compared to other state-owned enterprises. These reasons make the case ideal for learning about the phenomenon under study.

#### **3.3.2 Data collection and analysis**

To capture innovation practice, we select our interviewees from the section of business development, R&D, and innovation hub of the case company. The entrepreneurial ideas of the company have started and been verified in this section. The section is responsible for identifying entrepreneurial opportunities and finding ways to initiate innovative ideas that the company can introduce into the market, making it the ideal unit to study for our purpose to understand the CE process in depth in this context. It enabled us to explore how innovative ideas were initiated, developed, and implemented to engage the company in different entrepreneurial activities. 22 interviews were conducted with 18 informants (see **Table 3.1**, in Appendix). In four cases, we returned for a follow-up interview to deepen the conversation on identified topics. We conducted interviews with senior directors, managers, and senior experts in business development and R&D innovation, marketing and finance. The interviews were conducted in the Amharic language (which is the official

language of the country), recorder, transcribed and translated to English. The informants were free to express their thoughts and experiences in their mother tongue language. The interview consists of open-ended questions concerning the why and how of research questions derived in line with the literature review. Furthermore, it includes how entrepreneurial activities take place, ideas initiated, developed, and implemented, and focuses on the entrepreneurial processes and outcomes of CE in the context of state-owned enterprises. Moreover, we strengthen our data collection with archival material on the innovation practice of the company such as press releases, corporate websites, brochures, presentations, and internal documents.

To analyze the material, we produced a case database with all transcripts and supporting material. First-level analysis resulted in a thick case description and identified the two innovation outcomes in focus. The second step was to analyze the in-depth processes leading to the two innovations as instances of corporate entrepreneurship in context. Finally, through a third step, we read and re-read the material in light of previous literature, until we arrived at the insights that form our theoretical contribution (Eisenhardt, 1989).

### **3.4 Case Context**

The interrelation between the case and its environment is crucial to develop a contextualized understanding of the phenomenon. Below we elaborate on the context of Ethiopian Airlines across dimensions of spatial, business, social, institutional, organizational and ownership context.

#### **3.4.1 Spatial Context**

Welter (2011) notes the impact of spatial contexts in terms of geography and location on entrepreneurial firms with their national, regional, and global distributions. The aviation industry is increasingly becoming essential for economic development and regional integration in developing countries in the Global South (Abate, 2016; Njoya & Nikitas, 2020). In addition, the air transport industry contributes to the development of a diversified export base and tourism industry in the East Africa sub-region (Irandu, 2008). The demand for air traffic has increased in the Global South as measured by revenue passenger kilometers (RPKs), reaching 5.5% in Africa and 9.5% in the Asia Pacific in 2018 (AFRAA, 2019). Africa's population size (1.28 billion) and large landmass (30.2 ml km<sup>2</sup>) could present a favourable environment for the growth of air transport industry. In addition, most

African countries are landlocked making air transport preferable to connect with the rest of the world. However, due to economic stagnation and low per-capita income, aviation in Africa has become the least developed in the world (Abate, 2016).

Zahra et al. (2014) also highlight that countries well located geographically could benefit from their location advantage. Ethiopia, situated in Eastern Africa, is often regarded as being at the middle of the world (Samunderu, 2023). Its strategic geographic position has enabled it to serve as a key aviation hub, connecting Africa with the Middle East, Asia, and Europe (International Finance, 2020). As a result, Ethiopian Airlines has a geographical advantage to control regional and international flights (Tolcha et al., 2020). Ethiopian Airlines operates primarily from its main hub at Bole International Airport in Addis Ababa, providing connectivity to various destinations across Africa, the Middle East, Asia, Europe, and the Americas. Besides, Bole International Airport being located at the capital city of Ethiopia, which is the third largest seat of UN agencies, and the head quarter of African Union (AU) positions the Ethiopian airline hub as geographically advantageous. This context makes the airline one of the best networking hubs for connecting Africa to the world. Furthermore, Addis Ababa has emerged as a major hub, attracting and transferring significant passenger traffic, particularly from Asia moving to the American continents (International Finance, 2020). Recently, Ethiopian Airlines repositioned its cargo operations from Mexico City Airport (MEX) to the brand-new Felipe Ángeles International Airport (NLU), bringing a new chapter of possibilities to provide an elevated level of services to valued customers (Corporate website, Press Release, 2023).

### **3.4.2 Business Context**

The business context highlights the conditions of market dynamics, competitive landscape, industry trends, and economic conditions in the airline market. Zahra et al. (2014) suggest that opportunities offered in the industries vary depending on the intensity of competitive forces. The African aviation market, where Ethiopian Airlines operates, is the fastest aviation development market in the world, paving the way for airlines both regional and international carriers to exploit this opportunity (Samunderu, 2023). Air transport increases the economic competitiveness of African countries and attracts foreign direct investment by which they can access the world market and enhance regional integration (Abate, 2016; Tolcha et al., 2020). According to the International Air Transport Association (IATA, 2018), the air transport industry in Ethiopia contributes 5.7 percent of the country's GDP

(total US \$4.15 billion) including foreign tourists arriving by air. Accordingly, air transport generates benefits to the wider economy by providing speedy connections between various cities (IATA, 2018). The airline industry is characterized by growing demand, infrastructure development, and increasing competition. Besides, the Ethiopian government had undertaken infrastructural expansion projects at different phases in order to go with the increasing demand for the airline service. The industry position is influenced by factors such as route networks, service quality, fleet size, and alliances. Ethiopian Airlines has been pushing for a strong market position by developing strategic partnerships and alliances and acquiring shares with other African carriers (Samunderu, 2023). The airline has been a member of the Star Alliance since 2011 which enabled it to narrow the gap with the leading industry players. Currently, Ethiopian Airlines serves over 137 international destinations in 75 countries. Moreover, Ethiopian Airlines Cargo is the largest cargo network operator in Africa, covering 46 destinations worldwide. Ethiopian Airlines has acquired the technical and operational capability to repair and overhaul the latest commercial aircraft; to train pilots, aircraft engineers, and technical personnel; and to offer intercontinental cargo services in partnership with leading global service providers (Oqubay & Tesfachew, 2019).

The use of technology and innovations puts the airlines at the top of African aviation (Africa today, 2023; Africa Facts, 2017; Business Insider Africa, 2022; Odhiambo, 2023; Oqubay & Tesfachew, 2019). Ethiopian Airlines with the use of new technology strives to meet passengers' traveling experience and onboard comfort. The airline is considered leading in Africa, for example, it was the first airline in Africa to operate the newest airplanes from Boeing and Airbus (Al-Kwif et al., 2020). Adapting innovation practices has enabled the airlines to remain competitive continentally and globally. Ethiopian Airlines introduced an upgraded chat-bot with various self-service features, launched inflight connectivity, and established a global standard cargo conversion program (Annual report, 2020/21). Such CE activities make the airline a relevant case for our research to deepen our understanding regarding the innovation practices of the company in a competitive environment.

Moreover, it has been recognized as raising concerns over issues of environmental degradation, carbon emissions, and climate change (Kılıç et al., 2019). To date, the contribution of the aviation industry to the emission of greenhouses has increased

considerably (Becken & Mackey, 2017; Kim et al., 2019; Yilmaz & Atmanli, 2017). Currently, the air industry receives considerable attention for its impact on environmental issues. IATA member airlines are working to achieve net-zero carbon emissions from their operations by year 2050. In this regard, decarbonizing the transport sector in the Global South presents an opportunity to contribute towards achieving net zero by 2050 which emphasizes the essential of energy system transformation, technological breakthrough, and collaboration (Emodi et al., 2022). Ethiopian Airlines reveals the development of a sustainability strategy to meet the industry's target of net zero emissions by 2050 in line with the support of sustainable aviation fuel (thesouthafrican.com, 2023).

### **3.4.3 Social Context**

Networks as a social context can be a means of financial capital, information, potential employees, and customer access (Welter, 2011), whereby it provides an opportunity for firms to combine their resources to various entrepreneurial initiatives (Thorgren et al., 2012). The airlines engaged in various CE activities in the form of external corporate venturing including corporate venture capital, joint venture, and alliances to expand its networks in Africa and the other world. Over the years, Ethiopian Airlines has acquired significant equity stakes in several other African airlines (FurtherAfrica, 2023). For example, Ethiopian Airlines has financial stakes and ownership in multiple companies such as ASKY Airlines (40% stake), Chadian Airlines (49% stake), Zambia Airways (45% stake), Malawi Airlines (49% stake), Air Congo (49% stake), Ethiopian Mozambique Airlines (99% stake), and Nigerian Airlines (49% stake) (International Finance, 2020; airspace-africa.com; corporate website; Meichsner et al., 2018). Through the help of such agreement, the airlines can build a network of feeder airlines covering African carriers and connect to the rest of the world (International Finance, 2020). Furthermore, such network carriers enabled the airlines to expand global air transport networks with complete service chains, customer care, and lounges all around the world and gain market access (Samunderu, 2023). In a rapidly changing global environment, airline companies can provide advantages from strategic alliances in the form of sharing risk, reducing costs, and acquiring scarce resources (Amankwah-Amoah & Debrah, 2011; Göv, 2020). Strategic alliances in the air industry can also facilitate global network collaboration and avoid existing countries' restrictions and market barriers among its associate members (Meichsner et al., 2018; Seo et al., 2021). Ethiopian Airlines has strategic alliances with international carriers such as Lufthansa and Air France. A strategic collaboration through

code-sharing agreements (with 29 airlines in 2017) could also provide better intra-connectivity (Andoh et al., 2019; Al-Kwif et al., 2020; Samunderu, 2023). Code-sharing agreements are important because the flights of the member airlines appear as direct flights with the use of a common code to connect between cities (Göv, 2020). On the other hand, the International Civil Aviation Organization (ICAO) and various countries are proposing regulations and policies intended to reduce aircraft greenhouse gas emissions (Kim & Son, 2021). In this regard, Ethiopian Airlines uses modern flights operated with sustainable aviation fuel in cooperation with Airbus, demonstrating its commitment to realizing a sustainable air transport industry (Corporate website, press release, 2023). Such activity implies the commitment of the airlines with the help of multistakeholder engagement and collaboration to achieve SDGs (Nonet et al., 2022).

#### **3.4.4 Institutional Context**

Institutional context including those formal institutions in the form of political and economic rules that can facilitate or restrict entrepreneurial opportunities (Welter, 2011). Institutional changes and government intervention are furthermore known to influence the effectiveness of entrepreneurial activities in developing countries (Segaro & Haag, 2022). The regulatory aviation framework in Africa is highly complicated and has had negative effects on its growth over decades (Meichsner et al., 2018). In a competitive and market-driven industry, the role of governments in promoting national interests through interventions in air transport at both national and international levels has not diminished (Abate et al., 2020). In the airline industry, the national culture, norms, and beliefs influence the process of service design and delivery. Airline management should be aware of their own cultural biases, positive or negative, on the diverse needs and backgrounds of passengers while delivering services (Yayla-Kullu et al., 2015).

The airline operates within the regulatory framework set by Ethiopian civil aviation authorities and international aviation bodies like the International Civil Aviation Organization (ICAO) and the African Civil Aviation Commission (AFCAC). In this regard, the Ethiopian Airlines Board of Management is responsible for ensuring that the company complies with the law and standards of best practices in generally accepted corporate governance and business ethics (Annual report, 2012/13). Accordingly, Ethiopian Airlines operations should adhere to safety standards, licensing, and compliance with regulations. According to Asefa et al., (2013), however, the airlines are criticized in communication

technology and the Internet due to excessive control of the government. Meichsner et al. (2018) suggest that, in the airline industry, the government should embrace deregulation, reduce aviation taxes, and support the aviation infrastructure to achieve long-term economic growth. In addition, the need for government support creates an opportunity to ensure the appropriate use of public resources (Harris et al., 2020). In this regard, the government of Ethiopia are committed to support Ethiopian Airlines. The government has permitted the access of external loans for investments by public enterprises including Ethiopian Airlines (Oqubay, 2015). For example, through government support and collaboration, the construction of Addis Ababa Bole International Airport (the main Hub) was financed by Chinese Exim Bank equivalent to five billion US dollars in long-term financial loans (Oqubay, 2015; Tolcha, 2017). Furthermore, the government provided Ethiopian airlines with loans at a favourable and non-commercial rate through state-owned banks (Tolcha, 2017). It also adopted an aggressive open skies policy in bilateral negotiations within as well as outside Africa (Njoya, 2013).

#### **3.4.5 Organizational Context**

Zahra et al. (2014) contend that organizational context varies depending on the extent of the organizations in encouraging and discouraging entrepreneurship. Organizational culture, values and sociocultural practice can be conducive to stimulating entrepreneurial activities (Krueger et al., 2013). Ethiopian Airlines was founded on 21 December 1945 and started its operation in 1946 with five C-47 aircraft and made its first flight to Cairo via Asmera (Ethiopian Factsheets, 2023). Through time, Ethiopian Airlines has passed under three different types of political regimes for more than 75 years including the Emperor Haile Selassie Period (1946-1973), the Marxist-Leninist Period (1974-1991), and the EPRDF Period (1992-Present) (Andoh et al., 2019). Over the past decades, the airline has established itself as a leader in all kinds of aviation business: technology, leadership, network, expansion, and aviation mentoring (corporate.ethiopianairlines.com). The Airlines won several awards, including being the best airline in Africa 2023 (six years in a row), the best business class airline in Africa 2023 (five years in a row), and the best economy class airline in Africa 2023 (five years in a row), best business-class onboard catering in Africa 2023 (two years in a row) and cleanest airline in Africa 2023 (Odhiambo, 2023). This has established Ethiopian Airlines as Africa's leading carrier. With the motto "Bringing Africa Together and Beyond," the airline has developed extensive networks

across Africa and beyond, connecting its main hub in Addis Ababa to the rest of the world (corporate.ethiopianairlines.com). Ethiopian Airlines has operated with a culture rooted in business principles and hired managers without regard to their political involvement (Workneh, 2018). The airline is also known for its ability to develop a corporate culture and a high level of commitment among top managers and other employees (Oqubay & Tesfachew, 2019). Furthermore, the organization's culture fosters a learning environment, which enables it to build adaptability in the system. Ethiopian Airlines, being the national flag carrier of Ethiopia is entrusted with the mandate of cultivating an enabling and talent-centered organizational culture. Its organizational culture is open to innovative endeavors as it is competing in an aviation industry that highly demand flexibility and heightened commitment.

#### **3.4.6 Ownership Context**

Foss et al. (2021) highlight that ownership context is fundamental to a firm's strategy and economic function. However, ownership structures can differ between developed and emerging economies (Zahra et al., 2014). Ethiopian Airlines is wholly owned by the government of Ethiopia. During the commencement of Ethiopian Airlines in 1945, the government contributed a startup capital of 1 million Ethiopian birr, and the remainder of the company's state-authorized capital of 2.5 million Birr was to be balanced by the government over the following two decades (Huber, 2022). State-owned companies have the appearance and behavior of private organizations perhaps the characteristics differ from one country to another country (Roper et al., 2011). In Ethiopia, the government exercises its ownership by appointing board members to govern the airlines in line with business standards and regulations. Even though the airline is a government-owned enterprise, the arrangement was made to run the airline free of government interference. The top management builds a management structure that continually analyzes and evaluates the airline industry at regional and international levels (Al-Kwif et al., 2020). Corporate governance structure provides the airlines operational autonomy and avoids interferences. For example, during successive regimes, the Ministry of Finance is responsible for paying for the airline services for the head of state or prime minister, and even during the conflict, the government must compensate the airline for cargo transport services (Oqubay & Tesfachew, 2019).

Moreover, unlike other state-owned carriers, Ethiopian Airlines has little government interference and the management team has been given independence to run the airline according to normal business principles (Moore, 2020). The airline has been operating its day-to-day business independently as a commercial entity like any other corporation, with the support of competent leadership and well-trained staff (International Finance, 2020). In addition, the airlines are autonomous from government involvement, even in times of turbulence and regional conflict, with some exceptions (Al-Kwif et al., 2020). Most of the time the board members are appointed in affiliation with the ruling party, but it prioritizes hiring of professional management staff on merit rather than political placements (Barlow, 2013). In addition, over 75% of the board of directors has remained in their post for over a decade and this ensures the trust between them which can be an asset of much-needed social capital (Andoh et al., 2019). On the other hand, it is recalled that from 1975-2000, when government interference posed major operational challenges, ultimately the government of the day had no interest in jeopardizing the survival of the airlines (Oqubay & Tesfachew, 2019). Nowadays, the airline recognizes creativity and innovation and tries to continuously improve and reward its employees for their integrity, people skills, and teamwork (Hattangadi, 2023).

### **3.5 Findings**

#### **3.5.1 Input**

Entrepreneurial opportunities are the result of various drivers across different factors. The airline industry is characterized by changing competitive environments. This environment makes the airline industry in the developing country context find ways to cope with the competition. Among those mechanisms to compete in the market, companies pursue corporate entrepreneurship by engaging in various innovation activities.

Changes in the market competition force the company to search for entrepreneurial opportunities that enable it to survive in the marketplace. The airline industry has increased considerably with the use of high technological advancements which resulted in a highly competitive environment. Ethiopian airlines have been working to update itself with the changing environment. This competition makes the airlines search for entrepreneurial initiatives and improve their capacity to cope with the changing environment. Informants have replied to the competitive environment as one of the driving forces for seeking and engaging in various innovation related activities:

*“The aviation industry is a VUCA industry- volatile, uncertain, complex and ambiguous. If the airline can’t update itself regularly, and can't keep up with the changing environment, it is out of business...We have to cope with that change. Unless we can operate at the competent level of our competitors, it will be hard for us to continue existing. It is not only about copying but becoming a leader in the industry by innovating new technologies, services and products. We have to adapt to the changes.” (R7)*

*“The aviation industry is very competitive. We totally don’t know what is going to happen next. It is very unpredictable. It is a very sensitive industry. For example, the aviation industry is sensitive to the recent Ukraine- Russia war, the China- Taiwan conflict, Covid, and any other incidents in the world including the death of the Queen. Our industry is sensitive to the environment. All these combined create a very stiff competitive environment externally. In order to cope in such an environment, you need to have a very agile establishment that is flexible to adapt. So, the only solution is entrepreneurship and innovation. We don't have another choice but to be agile with new innovations.” (R11)*

The airlines strive to work on improving its operational efficiency to compete in the market with state-of-the-art technology. The identification of opportunities from the external environment helps in recognizing and identifying innovative ideas. By doing so, the company can enhance the opportunities to update its technology by providing the required services as its competitors do in the market. The use of advanced technological innovations in the market is also another driver that changes the nature of competition in the industry. This is illustrated by the following informant’s reflection:

*“We are living in a digital age where new advanced technologies enter the market constantly on a daily basis. This is an era where a new technology is replaced by another better-advanced technology in a year’s time. In its 75 years’ journey, the airline has come a long way. We want to keep the airline on the progressive road that it is already on... We look into innovating new technologies and also adopting other technologies to our context.” (R6)*

Furthermore, the airlines consider the local context of the organization and its strategy while improving and adopting technologies in its systems and operations. The creation of new business venture opportunities and innovative ideas also need to be aligned with the organizational strategy. After considering the organizational strategy, new innovative ideas and technologies were adopted to respond to the increasing needs of the competition in the industry. For example, the use of mobile apps, self-check-in kiosks and the new website launched were technologies adopted from other competitors.

*“Taking the prevailing competitive environment into consideration we work in alignment with the organizational strategy. These ideas are aimed at creating business venture opportunities for the organization. For example, we might incorporate locally developed technologies and internationally developed systems. In alignment with the organizational system, we adopt them to our advantage.” (R8)*

*“Through brainstorming, we look at various technologies in the aviation industry. We look at technologies in the market and what our competitors are doing on a daily basis. After studying their feasibility, we adopt technologies into our airline.” (R10)*

The airline industry could adapt itself to the changing demand of the passengers, environmental challenges and technological advancements through engaging in different innovation activities. In such an environment the airlines have to find ways to improve its efficiency to exist in the market competitively in such a sensitive industry. This also requires assessing the industry regularly to understand the current position of the airlines in the market as one of the informants explained as follows:

*“We are always looking for improvement areas. The airline industry is very sensitive to competition. So, the airline has no choice but to be competitive and sustain its business. Through benchmark analysis, the airline regularly assesses its position in comparison to other international airlines. That's why we have to regularly look for improvement areas, so we stay competitive in the industry worldwide.” (R15)*

Technological change allows the airline industry to improve their efficiency, and operation whereby creates stiff competition in the market. The airlines must go in line with such technological advancements to serve its customers than competitors do. Technological change also provides opportunities to explore and utilize innovation and entrepreneurial activities.

*“Technology is changing so many things around us. That is why the airline incorporate in innovative and entrepreneurship activities in their systems. Technologies help an organization take a step further and stay competitive in the market. As a result, it is crucial for organizations to engage themselves in entrepreneurial and innovation activities.” (R8)*

Covid-19 also forced the airlines to work intensively to find entrepreneurial opportunities and innovative ideas for surviving in the market during such pandemic. The pandemic enabled the airline to invest in different innovative ideas to cope with the disadvantages of the pandemic in the market. The airline has worked in transporting various medical equipment across the continent and other global areas. This could result in the airlines existing in the market competitively and survive the pandemic.

*“Ethiopian Airlines was also one of the victims of the economic pressure because of the Covid pandemics. The airlines took some innovative measures to deal with the problem. The first of these innovative measures was converting passenger aircraft to cargo service. It was a big move and was also awarded. This measure of the airline was considered as exemplary internationally. The airline was considered to be trustworthy and to be competent in transporting various medical equipment within the continent as well as internationally by WHO.” (R13)*

The airline works to expand its market share in African countries and other areas. The airline would benefit by expanding its market through partnerships including shares in another African carrier whereby developing network hubs to connect to the Middle East, Asia, Europe and the Americas. Creating significant partnerships would benefit the airlines by bringing new innovations and expanding the business from such networks. The R&D and innovation hub evaluates and follows up with different divisions of the airlines regarding the business activities and innovation ideas as a result of the partnership.

*“The airline is considered to be the gateway to Africa. We invest a lot in expanding our businesses, mainly into African countries. We have the opportunity in African markets. We are engaged in expanding hubs and different African countries. The airline is also entering into multiple partnerships.” (R8)*

*“Our focus is to develop the business, creating significant partnerships that can benefit the airline and bringing in new innovations. There are multiple divisions in the airline. We look into these divisions’ business activities, innovation activities, audit gaps, and propose best solutions and technologies to their problems. We give directions and follow ups.” (R10)*

The expansion of networks was also part of the airline’s strategic plans for 2035. Fulfilling the strategic plan of 2035, the airline finds various opportunities that enables to expand its network hub across African countries and other global countries. Understanding and recognizing the different potential network hubs to expand its operations requires working intensively with other carriers in Africa and another market.

*“If you look at the 2035 vision, fleet and network expansions are huge focuses. The plan is to double our network and fleet expansion in the next 12 years. It is to make our fleet 250 from the current 130 and more. This in turn increases networks. In this fiscal year, we will open 5 new locations. The plan is to diversify our business more.” (R4)*

*“We use the hub modality system. It's very crucial, especially in being on top of other African Airlines with the marketing concept of “connecting Africa to the rest of the world.” African countries are growing economically, which means there will be investments and different transactions between different countries.” (R7)*

Moreover, the airline is diversifying its business and working to support other African airlines. Diversifying the business by gaining ownership in the form of stakes or shares in other African carriers enables the airlines to influence and control the continent’s aviation industry. For example, the airline has held a large number of equity shares in other African

carriers such as ASKY Airlines (Togo), Chadian Airlines, Zambia Airways, Malawi Airlines, Air Congo, Mozambique Airlines, and Nigerian Airlines.

*“Diversification brings in more revenue for the airline. It makes the airline more influential on the continent. For example, the 45 or 49% share deal in Zambia shows that Ethiopia has influence over the Zambia airline. On behalf of the airline, we would have more influence in the continent’s aviation industry. Geopolitical influence is a huge power. Alongside broadening business opportunities, having influence over the continent’s aviation is another road we are on.” (R7)*

The regulations of the airline industry, about sustaining the environment from carbon emissions, obliged the airlines to use the latest aircraft contributing to the reduction of the emissions. This kind of aircraft is very expensive. The Ethiopian government supports the airlines in dealing with such kind of matters to fulfill the regulations.

*“Yes, there are matters that need policy support. For example, the idea of SAF, Sustainable Aviation Fuel, in relation to carbon emission is becoming mandatory. The Sustainable Aviation Fuel policy makes it mandatory for aircraft to use blended fuel. It is very expensive; it is 4 times what we normally pay. We get government support.” (R4)*

### **3.5.2 Process**

The informants replied to the possibilities of the company in finding innovative ideas essential to improve efficiency and competitiveness in the market. Innovative ideas were initiated through the help of different sources. Identification of opportunities is one of the mechanisms through which ideas can be initiated. The possible innovative ideas in the airlines were initiated and identified using the business development, R&D experts and innovation hubs by exploring the existing problems and identifying gaps as the following informants describe:

*“Innovation is related to the R&D section. We start off by looking at opportunities and ideas under our care and identifying problems. We then move to identify possible solutions. Sometimes we need new innovative ideas*

*and sometimes we only need to improve the systems that we already have as remedies.” (R5)*

*“As an R&D and innovation hub, our task is to bring in new ideas, new processes, and new ways of operation. In doing so, we also assess various bottlenecks and how to solve them. It's our job to think outside the box and see if there are other opportunities out there. We also look into ways of grabbing this opportunity for the best interest of the Ethiopian Airlines. We can't directly take these opportunities and apply them here just because they seem to work for other airlines. We have to be able to contextualize and adapt them to our reality.” (R7)*

Understanding and utilizing the existing resources of the airlines is significant for the identification of opportunities and innovative ideas. This enables the airlines to use opportunities that have not been utilized so far. In addition, it creates the possibility to solve the problems with the available resources of the airlines. The following informants explained this as follows:

*“We make full use of the resources at our disposal. We look at opportunities within the company that put us at an advantage against our competitors. We try to use opportunities that are not fully utilized to the fullest.” (R6)*

*“As an R&D and innovation hub, we identify problems, opportunities, and potential within the organization. We try to see how the organization can make the best use of its resources and how we can solve problems with the resources we have.” (R7)*

While working on the identification of opportunities and gaps, the section is also looking for recommendations from other internal stakeholders or departments for possible feedback on the problem raised. Such feedback was considered in brainstorming sessions while developing ideas to solve the problem as the informants replied:

*“Ideas come from the recommendations that we provide during our research of problem identification. We communicate internally with different stakeholders (departments) who have different recommendations, and we*

*have brainstorming sessions within the section where we look deep into their feedback for developing ideas. We try to pick the best recommendations to solve problems.” (R1)*

One informant stresses the importance of recognizing the problems, which is the starting point to generate innovative ideas. Furthermore, considering the airline industry and adapting their best systems and technologies to the local context is significant for the performance of Ethiopian airlines. The informant elaborates in the following way:

*“It is problems that lead to idea generation. Problems are the first reasons for generating ideas. Secondly, we look at other businesses in the same industry and compare our performances. We might adapt their system and technologies to our context. I would say problems are the best idea generators.” (R5)*

The R&D and innovation hub of the airlines is mainly focused on finding innovative ideas that help to improve its operations and efficiency through problem identification. They are doing research into arriving a possible solution which intends to find innovative ideas that help to alleviate the problems. Innovative ideas were approved using a variety of processes. In the R&D and innovation hub there is an innovation audit, they call it In-audit. The innovation audit helps to identify gaps and problems in every process. Moreover, the innovation audit enables the airlines to compare the existing status quo against the international status quo. Through the process if they find gaps, they will work to fill the gaps as the informants explained as follows:

*“The main task of our section is to generate ideas. We have various idea-generation tools. To mention some, the first and main tool we use is an innovative audit- In-audit. In-audit compares the organization’s status quo against the international status quo and identifies the best out there. If we find out that practice is the best, we celebrate it. If it is not, then we try to see the reason for the gap. Then we work towards filling that gap.” (R7)*

*“Our staff members bring ideas from various sources. They are evaluated by the immediate supervisors followed by discussions. Based on the formal process, we conduct feasibility studies. It is then sent to the senior*

*management for review. If the idea passes, with the approval of the senior management it enters the system.” (R8)*

Furthermore, while working with innovation audit, they consider three core areas: people, process, and technology, for the implementation of innovative ideas. It considers the availability of qualified personnel with the required skills, knowledge, and experience for the effectiveness of the implementation of the idea. In addition, the efficiency of each process has also been checked to support the innovative ideas to be succeeded. The availability of technology to support innovative ideas has also been considered during the process. Once they consider these core areas, they will prepare the documents and present the projects for approval as one of the informants replied as follows:

*“Through Innovative Audits we identify gaps and problems in every process. We have three core areas- people, process and technology. We have to ask ourselves- do we have the latest technologies? Do we have the best qualified personnel in the process?... Is the technology in the outputs the latest of what's available out there? And the third question is- Is the process efficient? We look at the efficiency of each process. After picking those that are efficient, we prepare documents for each. We then presented these development projects for approval. If we get the go-ahead, then implementation follows.” (R11)*

The R&D innovation hub collects the required data once the idea is developed. They were looking to gather real data, analyze and present the outputs to the respective executives. The potential cost and benefit of the innovative ideas were analyzed in detail. Then, for each of the ideas initiated, it should be approved and assigned to a project sponsor. Finally, the CEOs are in charge of implementation as the informants described this as follows:

*“Projects are initiated, approved and are assigned sponsors. We collect real-time data, analyze it and present the outputs to the executive. Once it reaches the executive, it has a project charter that contains return of investment (in case it needs investment) and other important information. Obviously, it has to be a feasible innovation concept. It goes through our office and should finally get the CEO's approval.” (R11)*

*“Once the ideas are identified, we move to the questions of how to utilize them, identifying sections to sponsor them, what are the human resources and type of system and strategy requirements, what is the amount it is going to cost and so on. Detailed analysis is done ...We study the potential cost and benefits of the idea both organization and customer wise.” (R9)*

Furthermore, there is a system in which different departments send their ideas to the R&D and innovation hub and also assignments from the CEO. The section then collects the relevant data to strengthen the new idea and again conducts a feasibility study and cost-benefit analysis intended to look at the return of investment. Moreover, the R&D and innovation hub invites and engages stakeholders from other departments during the evaluation of the potential innovation ideas sent to them.

*“There is a system where different departments generate their own ideas. Our section develops these ideas and documents them. We conduct feasibility studies and cost-benefit analyses and send them back to respective sections for their feedback. Then we move to action planning. Based on the action plan, implementation follows.” (R1)*

*“Ideas come from different sections concerning their respective businesses. We evaluate the ideas based on the standard. We conduct cost-benefit analysis and feasibility studies. We engage the stakeholders. For example, if you come up with an idea of improving the call center service, then we bring people from the call center to work with you, because implementation happens through them.” (R7)*

During the feasibility analysis, they are looking for benchmarks to support and strengthen the new idea. This could provide the opportunity to compare the airline within the industry to understand the best practices and identify possible gaps in the operations. The idea will be evaluated in terms of the benefits that it will generate and the costs that it will be incurred. When the innovation idea is feasible, the implementation follows after getting the approval of the executive.

*“We are looking for benchmarks to support the idea or we include benchmarks in the document. Cost-benefit analysis is conducted to calculate*

*its return on investment. Some projects require investment, and some don't. We need to see how much it would cost and what benefits it would bring in return.” (R2)*

There is a communication with stakeholders about the problem and the solutions that were proposed concerning their section. Then, relevant feedback was provided by the stakeholders on the potential opportunities and challenges of the solution proposed. This will be followed by discussions with stakeholders to strengthen the idea.

*“Ideas come to our office. It is stakeholders who are actually at the operational level who put it into practice. We communicate with them about the problem and the solution that we propose. They give us their feedback about the opportunities and challenges of the solutions we suggested. We have a thorough discussion with them on the topic. Then we move to implementation.” (R5)*

### **3.5.3 Output**

Two distinct innovation outputs have been followed in depth and provide opportunities to explore processes of corporate entrepreneurship in context.

#### ***Innovation outcome 1: Converting passenger seats to cargo freighter***

The first innovation output concerns converting passenger seats into cargo freighters during Covid-19. The passenger planes were designed to offer maximum comfort and service for travelers, making the transition to cargo a surprising transition. Ethiopian airlines together with its partner, Israel Aerospace Industries (IAI), converted passengers flight to freighter conversion at Ethiopian MRO facilities in Addis Ababa. The new capacity in cargo aircraft opened for new collaborations. A very important cargo has been medicine and other medical equipment to different hubs across the world to tackle the pandemics and the airline has become a partner of many humanitarian organizations such as the WFP.

It all started with the covid-19 outbreak when the number of passengers dramatically declined. Then, Ethiopian Airlines opened a cargo conversion center in partnership with

Israel Aerospace Industries (IAI) which becomes the largest and leading cargo network in Africa.

*“During covid 19, passenger numbers were cut down automatically. The only means of revenue was cargo at the time. We directed our business to cargo service. This was because of agile and effective management in scanning the situation of countries.” (R2)*

Once the airlines convert their passenger flight into cargo freighter, the opportunity to create network hubs has been expanding. The airlines have operated 5,645 Cargo flights in the cabin of passenger aircraft and transported more than 121,750 tons of cargo across its global network as of a year since its first freighter operation on March 25, 2020 (Press release, ethiopianairlines.com). Accordingly, the flights contributed to the total of 33,182 flights and 735,869 tons of cargo transported during the period from March 25, 2020, to March 25, 2021. During a one-year operation, the airlines has expanded its flights to different hubs across the world to tackle the pandemics and the airlines has been increasing its capacity which enables to be an ideal partner of many humanitarian organizations such as the WFP.

*“Cargo Service is a good opportunity for our airline. We are purchasing other airlines, which help us to create multiple hubs. Our cargo service is really expanding; it's a huge facility.” (R11)*

The cargo business has been reported as one of the effective strategies to tackle the pandemic and survive in the marketplace. If the airlines had not converted into the cargo business, it would suffer financially in the market during the covid-19 outbreaks. Therefore, the airlines have maintained financial capability during the covid-19 through the cargo business as one of the informants explains:

*“During the covid pandemic, our airline was one of the three airlines that survived cost positive. This is the result of the innovative work of the senior managers, our section, and the entire employee force. We were able to shift our passenger aircraft to cargo aircraft. If we hadn't done that, the airline would have suffered financially.” (R7)*

The conversion of passenger seats to cargo freighters has been made with internal capacity of the airlines. Under MRO section of the airlines, the conversion has been made successfully in time of Covid-19 in partnership with Israel Aerospace Industries (IAI) which enables the airlines to be one of the largest cargo networks in Africa carriers. The cargo conversion has also increased the MRO services using state-of-the-art technology and knowledge transfer as a result of such capacity building. During the covid-19, Ethiopian MRO with its internal capacity, temporarily converted 25 of its passenger aircraft to freighter to boost its cargo capacity as demand to transport emergency medical supplies to risky areas (Press release, ethiopianairlines.com, 2021). During the covid-19 pandemic, Ethiopian Cargo & Logistics Services adapted its operations to the evolving global demand for air cargo services. In response to the pandemic, Ethiopian Cargo has extended its reach to 75 destinations globally and carrying much needed medical supplies to areas in need.

*“In fact, we have achieved this with our internal engineering capacity. In all parameters, Ethiopian Airlines has proved to be one of the few resilient global airlines against COVID-19, and which is the only one that remained profitable as well” (Annual report, 2020/21)*

*“Passenger crafts were converted into cargo services. The aircrafts were made into cargo aircrafts with modification to the passenger seats. The airline gave cargo service in transporting medicine to risky areas.” (R15)*

The conversion was challenging for the airlines with the available staff. With these changes in the environment, the airline must improve its capacity for enhancing the innovative activities of the company for engaging in various CE initiatives. The swift and extensive transformation during COVID-19 also signals an organizational culture where innovative ideas are picked up on and implemented. It also requires sanctions from top management.

*“The shift from passenger to cargo service was challenging. Aviation is a highly volatile industry. It was only possible with the huge support of our senior managers.” (R6)*

***Innovation outcome 2: Sustainability initiative through working with farmers’ cooperatives***

The second innovation output concerns a sustainability initiative leading to collaborations with farmers' cooperatives to provide local produce instead of imported processed food in the airline. Through this initiative, the airline supports local farmers to supply their produce for catering purposes during in-flight service. Previously, the airline imported many catering products from abroad. The outcome is positive for local farmers and reduces import of processed food, improving both social and environmental sustainability.

It started with an effort of the R&D and innovation hub to support local farmers' cooperatives. The gain of using local produce is manifold but was very limited because of international regulations and difficulty for local farmers to meet those regulations (e.g., packaging processes etc.). Instead, the airline imported catering products, both food and beverages from abroad. There are many cafeterias in the airline including the cafeteria in the aviation, the main cafeteria, MRO (Maintenance, Repair, and Overhaul) cafeteria, and cargo cafeteria. In addition, the airline provides in-flight catering service both food and beverages for passengers, including economic and cloud nine passengers depending on their class. All these cafeteria services require input. In partnership with USAID (United States Agency for International Development) the airlines have been engaged intensively to improve the production processes of local producers by supporting with advanced technology to meet the quality standards of the IATA (International Air Transport Association) regulations.

*“The aim of the project is to substitute imported goods. Before this project, all the inputs for the food and beverage service of the airline were imported. We work in partnership with USAID on this project. We created a Farmers Union called Meki-Batu with the necessary support. We have received \$ 5 million support from USAID” (R7)*

*“The organization trains local farmers' cooperatives and provides material support. Meki-Batu fruits and vegetables are working with us. The initiative came from our section/office. We help our investors in building their capacity and encourage them to add value to their products.” (R4)*

The initiatives provide Ethiopian farmers and food producers with technical assistance to ensure that they are able to meet the airlines' standards of quality. Ethiopia is home of fertile farmland and home to the highest number of cattle in Africa. To capitalize on this

resource required supported with technology which the airline provided in order to involve farmers in its catering services. In addition, the airlines will provide support to farmer cooperative unions, youth groups, women groups and other local agriculture businesses to enable them to meet the production requirements.

*“Developing local companies and working with startups so they can reach the highest competitive level are a few examples. Recently we had import-substituted vegetable products by helping local farmers develop their capability and reach the quality standard.” (R6)*

*“Producers are hard workers, and we have very fertile farmland. We looked into ways the airline can support these farmers with technology.” (R7)*

The initiatives help the airlines to identify possible producers of inputs or raw materials for their catering services. This enables the airlines to find locally produced ingredients which reduce the need for foreign processed food items used for its catering services. This also create job opportunities for the producers. Moreover, these sustainability initiatives are important to increase import substitution. It contributes to the general import substitution move of the economy on national level.

*“We have established a partnership with USAID on import-substitution. We used to import agricultural products from abroad. Through this partnership, we work with local farmers in purchasing their products locally”. (R10).*

*“I have seen that the sustainability project replace the importation of agricultural materials for catering with locally produced products in collaboration with USAID and local farmers.” (R15)*

The initiatives offered Ethiopian farmers and local food producers technical assistance and financing as a capacity building scheme. It also facilitates the opportunity to find suppliers and support farmer unions by providing a loan facility that will help the airline to meet its needs (The reporter, 2020). Previously, the airline imported much of its in-flight food products and beverages from abroad, including supplies of chicken from Dubai and other countries using scarce foreign currency and the need for long transport. The initiative was tailored to support cooperatives unions consisting of millions of farmers with innovation

and technology which helps them in competing in the global marketplace. One of the respondents underlined the benefit of the initiatives for farmer producers as well as the nations in terms of foreign currency as explained below:

*“The initiative helps in saving foreign currency, encouraging local producers and farmers with the production of quality agricultural products, and increasing the culture of consuming locally produced products.” (R7)*

In general, the aim of the sustainability initiatives was to support local farmers with innovation and technology by which they will ensure even their presence in the global market. The initiatives enable the airline to source locally produce inputs or ingredients from local farmers for use during in-flight catering to its passengers. The local farmer producers can access technical assistance and finance to enhance their capability so as to meet the quality and standards of the airlines to serve its customers. The huge undertaking of providing local farmers access to technology was perhaps outside the scope of an airline. It points to the role of its state-ownership and thereby highlights the ownership context as an influential factor for CE.

### **3.6 Discussion**

Corporate entrepreneurship (CE) serves as a critical adaptation mechanism for organizations in competitive environments (Lumpkin and Dess, 1996) and enables firms to seize entrepreneurial opportunities to sustain and enhance their competitiveness through innovation practices (Hornsby et al., 2002). CE includes the successful identification and exploitation of entrepreneurial opportunities through the creation and combination of new resources internally (Burgelman, 1983). In state-owned enterprises in developing countries, this is particularly vital due to the double jeopardy challenges they face. Accordingly, understanding the different contextual factors on the corporate entrepreneurial process is deemed to be vital (Girma Aragaw et al., 2025). These contextual factors includes business, spatial, social, institutional, organizational, and ownership contexts.

The business context, characterized by high volatility and uncertainty in the market, required firms to remain agile and innovative to survive and succeed. In the aviation industry, characterized by volatility and intense competition, innovation is imperative for survival and growth (Alvarez & Barney, 2017). Our results show that the conversion of

passenger flights to cargo freighters during the covid-19 pandemic exemplifies how Ethiopian airlines leveraged CE through innovation imperatives to adapt swiftly to changing market conditions. The airline's innovative approach in utilizing its internal engineering capabilities to modify passenger aircraft for cargo purposes demonstrates its ability to adapt and innovate in response to external pressure. The intense competition within the aviation industry forces airlines to continuously innovate to stay ahead. On the other hand, the airline's approach to involving various stakeholders in the innovation process highlights the importance of collaboration. In addition, engaging employees in brainstorming sessions and feasibility studies ensures diverse perspectives which are critical for successful innovation.

Similarly, we found that the sensitivity of the airline industry to competition demands continuous benchmarking and regular assessment against international airlines to identify improvement areas and maintain competitiveness. Furthermore, we found that the critical need for regular updates and advancements in technology and innovation to keep up with the changing environment in the dynamic aviation industry. This context of technological advancement demands not only the innovation of new technologies but also the adoption and integration of existing technologies into the organization's operations.

Our results also show that Ethiopian airline strengthens its presence by taking African continent as market opportunities and influence across the continent through developing network hubs and forming partnerships in various African countries to connect to the rest of the world. This approach aligned with the airline's broader strategy of becoming the gateway to Africa and underscores the importance of regional market penetration and strategic alliances as inputs to corporate entrepreneurship. It has been seen from the finding that the airline's multiple divisions are engaged in identifying business opportunities, innovation activities, and addressing operational gaps. This systematic approach to innovation involves proposing solutions and technologies, providing direction, and ensuring follow-ups, which are essential for maintaining a competitive edge.

Moreover, we found that the airline's innovation practices extend beyond operational adjustments to broader socio-economic contributions, particularly through initiatives aimed at supporting farmer cooperatives as well as local development and import substitution. The shift to locally produced agricultural products for the airline's catering services support local farmers cooperatives and reduces the need for imported goods,

saving foreign currency and promoting the consumption of local products. Furthermore, these initiatives contribute to the airline's operational efficiency and promote community development and sustainable practices. Thus, as a state-owned enterprise, the airline plays a significant role in driving economic growth, promoting tourism, and enhancing regional integration, pinpointing the ownership dimension as an influential contextual factor.

The spatial context including geographical location and infrastructure influences innovation practices within state-owned enterprises. In Africa, the relatively underdeveloped infrastructure can pose challenges for innovation (Egbetokun et al., 2016). However, Ethiopian airline's initiative to establish multiple hubs across Africa shows an adaptive responses to spatial constraints. Ethiopian airlines' innovation capabilities are shaped by its strategic position as a hub for connecting Africa with the rest of the world. The airline leverages its geographic advantage to expand its network, open new routes, and capitalize on emerging market opportunities and foster regional integration and connectivity. Social context such as cultural norms, consumer behavior, and stakeholder expectations affects innovation within state-owned enterprises. The airline collaborates with local communities, government agencies, and non-profit organizations to address social issues, promote economic development, and improve quality of life. By aligning innovation efforts with social objectives, Ethiopian airlines can improve its corporate reputation and fosters stakeholder trust and loyalty.

Institutional contexts incorporating regulatory frameworks, government policies, and legal systems shape the operating environment of state-owned enterprises. Developing countries often face institutional challenge such as regulatory inefficiencies and lack of supportive policies (Egbetokun et al., 2016; González-Pernía et al., 2015). Ethiopian airlines operate within a regulatory framework which is governed by international aviation authorities and national regulatory bodies. The strict international regulation of aviation can be viewed as having a stabilizing effect on the national institution in this regard. Compliance with safety standards, security protocols, and environmental regulations is essential for the airline's operations and goes beyond national frameworks. Government policies and incentives may however influence the airline's investment decisions, innovation priorities, and strategic partnerships which was seen in the sustainability incentives of import substitution.

The organizational context include internal factors such as leadership dynamics, organizational culture, and resource allocation practice. Strong leadership support and a

culture of innovation are critical enabler of corporate entrepreneurship within Ethiopian airlines. The airline's leadership improves a culture that encourages experimentation, risk-taking, and collaboration among employees. Furthermore, resource allocation decisions prioritize investments in research and development, technology adoption, and talent development to drive innovation and sustain competitive advantage. The ownership context involves the ownership structure, governance mechanisms, and ownership objectives of state-owned enterprises. As a state-owned enterprise, Ethiopian airline operates under government ownership. Ethiopian airlines operate in a governance framework that ensures accountability, transparency, and aligned with public interest, further shaping its innovation agenda and investment priorities (Zahra & Wright, 2016). Given its state-ownership and standing in the national economy, we found purpose-driven goals beyond firm-level performance, rather aimed at a broader stakeholder benefit (e.g., distributing medicine during COVID-19 and supporting local farmers with transition to a national level import substitution). The findings show Ethiopian airlines ability to maintain profitability and drive innovation, even as a state-owned enterprise, which suggests effective management practices and strategic use of state resources.

### **3.7 Conclusion**

This study explores how CE unfolds in state owned enterprises through innovation practice in a developing country context. Specifically, it addresses how innovative ideas as part of CE dimensions are initiated, developed, and implemented whereby the different contextual factors affect CE for innovation practice in state owned enterprises in the case of Ethiopian airlines.

This study presents several implications and contributions to the theory and practice of corporate entrepreneurship. First, the study extends the understanding of how state-owned enterprises can effectively engage in CE through innovation practices to remain competitive. The finding shows that state-owned enterprises, despite their unique challenges, can leverage internal and external resource to innovate and adapt to market changes. Second, the study highlights the importance of contextual adaptation in CE. By tailoring external ideas and technologies to fit the specific operational context, state owned enterprises can ensure practical and effective innovations. The study contributes to existing literature by emphasizing the role of context in the innovation process. Third, the study underscores the socio-economic impact of CE practices in state-owned enterprises. The

airline's initiatives aimed at supporting local farmer cooperatives and promoting sustainability show that CE can extend beyond financial performance to include significant socio-economic contributions. The outcomes of the innovation practices reflect the ability to navigate complex contextual challenges, driving sustainable growth and making positive contributions to both the aviation industry and the communities it serves. Finally, for policy makers, the study highlights the role of government support and regulatory framework in shaping the innovation agenda of state-owned enterprises. By providing a conducive environment for innovation through supportive policies and incentives, government can enhance the competitive positioning of state-owned enterprises.

While the study provides valuable insights, it is subject to limitations and highlights suggestions for future research. The research focuses solely on Ethiopian airlines which may limit the generalizability of the findings. Future research should include multiple case studies across different state-owned enterprises and industries and countries to further validate and extend the findings.

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## Appendices

**Table 3.1:** Overview of interviews

Interview	Respondent	Department	Date	Length
1	R1	R&D	2022-09-19	45:51 min
2	R1 (2nd interview)	R&D	2023-03-13	14:31 min
3	R2	R&D	2022-09-19	48:07 min
4	R3	R&D	2022-09-19	24:55 min
5	R3 (2nd interview)	R&D	2023-03-13	15:07 min
6	R4	R&D	2022-09-20	35:45 min
7	R5	R&D	2022-09-20	24:32 min
8	R6	R&D	2022-09-22	36:27 min
9	R7	R&D	2022-09-22	62:24 min
10	R7 (2nd interview)	R&D	2023-03-15	16:12min
11	R8	Business Development	2022-09-22	28:16 min
12	R8 (2nd interview)	Business Development	2023-03-15	15:59 min
13	R9	Business Development	2022-09-23	25:07 min
14	R10	Business Development	2022-09-23	47:19 min
15	R11	R&D	2022-09-23	35:51 min
16	R12	R&D	2023-03-16	33 min
17	R13	Business Development	2023-03-17	56:09 min
18	R14	Business Development	2023-03-17	43 min
19	R15	Marketing	2023-10-12	18:07 min
20	R16	Marketing	2023-10-12	21:21 min
21	R17	Finance	2023-10-13	20:04 min
22	R18	Finance	2023-10-13	19:15 min

## CHAPTER 4: UNDERSTANDING THE ROLE OF HRM PRACTICES FOR CORPORATE ENTREPRENEURSHIP IN STATE-OWNED ENTERPRISES: INSIGHTS FROM ETHIOPIAN AIRLINES<sup>1</sup>

### Abstract

*Corporate entrepreneurship (CE) has been one of the initiatives to tackle challenges in the dynamic market environment and solve the long-term prosperity of firms. For the implementation of CE, the role of HRM practices is a pivotal component that profoundly influences an organization's ability to adapt and thrive in this dynamic environment. This paper aims to investigate the role of HRM practices in supporting CE in state-owned enterprises through the case of Ethiopian Airlines, focusing on how these practices are adapted to foster an entrepreneurial culture within the organization. A single case study approach was used since it is ideal for emphasizing the context. Ethiopian Airlines is selected as the case for being one of the largest and globally competitive companies of the state-owned enterprises in Ethiopia. I conducted 18 interviews with HR managers, HR professionals, business development, R&D innovation hubs managers and experts. We contribute to the existing literature by analyzing the role of HRM practices for CE in the public sector of developing countries. Furthermore, this paper contributes to existing literature by offering different contextual factors affecting HRM practices for implementation of CE in state-owned enterprises.*

**Keywords:** *Corporate entrepreneurship, context, HRM practices, state-owned enterprises, case study*

### 4.1 Introduction

Firms in the global competitive era find ways to survive in the environment. Corporate entrepreneurship (CE) has become a vital strategic imperative for fostering innovation and sustaining organizational growth. CE requires the organization's ability to explore new knowledge and exploit the existing knowledge (Zahra et al., 1999). However, it largely depends on the organization's intellectual capital both human and social capital (Hayton, 2005). An organization cannot achieve CE in the absence of highly skilled, competent, efficient, and knowledgeable human resources (Tang et al., 2015). In this regard, human resource management (HRM) is often seen as an important factor in stimulating entrepreneurship in existing organizations (Liu & Wang, 2012). Through effective HRM

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<sup>1</sup> Unpublished paper by Zerihun Girma

practices, employees will be encouraged to create new ideas, develop shared understanding, and implement changes in organizational activities, and contribute to the entrepreneurial initiatives of the organization (Ling & Nasuridin, 2010; Lei et al., 2021; Than et al., 2023).

Moreover, HRM practices can facilitate a culture of innovation, creativity, and initiative-taking, developing an entrepreneurial mindset within organizations (Mathushan & Kengatharan, 2022). HRM practices are increasingly required to make employees innovative and creative whereby they can find and exploit opportunities to achieve organizational goals (Shehata et al., 2021). Aman et al. (2018) argued that HRM practices are important for firms to establish an appropriate and conducive environment to improve the knowledge, skills, and attitudes of employees for innovation in existing organizations. For example, employees can be motivated to be entrepreneurial with the help of training and reward programs by which they can enhance their knowledge, skills, and abilities in support of CE (Schmelter et al., 2010; Tang et al., 2015). Furthermore, HRM practices are important for firms to enhance employees' ability to create and develop new products, services, and processes (Camelo-Ordaz et al., 2011).

The link between HRM practices and CE is studied in prior research (Morris and Jones, 1993; Hornsby et al., 1999; Hayton, 2005; Zhang et al. 2008; Castrogiovanni et al., 2011; Schmelter et al, 2010; Tang et al., 2015; Kim et al., 2021). For example, Morris and Jones (1993) have identified five HRM practices influencing the level of entrepreneurial initiatives in existing organizations including performance appraisal, compensation, orientation and training, recruitment and career development and job design. Schmelter et al. (2010) highlight the importance of staff selection, development, training and rewards as HRM practices supporting CE. Kim et al. (2021) develops a humane entrepreneurship framework emphasizing the importance of HRM practices including training and development, compensation and incentive, policies, and design which is appropriate to promote CE and innovation in existing organizations. Moreover, research suggests that enhancing the capabilities and motivation of employees requires appropriate HRM practices in recruiting, training, evaluating performance, and rewarding employees (Tang et al., 2015).

Even though HRM practices are recognized as a fundamental mechanism for fostering entrepreneurial initiatives in existing organizations, most studies have approached the

phenomena within the context of large private-sector organizations. However, the role of HRM practices in stimulating CE in the public sector, particularly in developing countries, still require further investigation. Consequently, studying the role of HRM practice in promoting CE in state-owned enterprises of developing countries provides a considerable gap to advance our understanding of the subject matter.

The paper addresses the following research question: *How do HRM practices affect CE in the public sector of a developing country.* This paper, therefore, aims to explore the role of HRM practices in supporting CE in state-owned enterprises through the case of Ethiopian airlines, focusing on how these practices are adapted to foster an entrepreneurial culture within the organization. The paper also addresses the different HRM practices including HR policies and procedures, recruitment, reward and compensation, training, and development, and performance appraisal that can facilitate and promote CE in state-owned enterprises of developing countries. The context studying the relationship of HRM practices with CE in developed countries might differ from the public sector context of developing countries. Nonetheless, there is scant literature on the role of HRM practices in creating a conducive environment for CE in state-owned enterprises, particularly Ethiopia. Therefore, recognizing the different contextual factors on HRM practices is also important for understanding its role towards CE in state owned enterprises. This paper contributes to the existing literature by analyzing the role of HRM practices for CE and discussing how different contextual factors affect HRM practices for implementation of CE in state owned enterprises through the case of Ethiopian airlines.

## **4.2 Theoretical Background**

### **4.2.1 Corporate entrepreneurship and HRM practices**

Prior studies have indicated that CE is seen as a key instrument for creating and sustaining competitive advantage in a highly competitive environment (Kuratko et al., 2004; Lumpkin and Dess, 1996; Antonic & Hisrich, 2001). It incorporates the creation of new business in the form of corporate venturing, innovations in the form of introducing new products, services, and processes, and strategic renewal in the form of restructuring and reorganizing a firm's strategy to respond to a rapidly changing environment (Zahra, 1991; Zahra, 1993; Guth & Ginsberg, 1990; Sharma & Chrisman, 1999). However, an appropriate internal environment is needed to foster and enhance CE in established organizations.

In a changing environment, human resources are viewed as valuable assets for firms to create value and sustain competitive advantage (Lei et al., 2021). HRM practices are one of the mechanisms for fostering entrepreneurial initiatives and attitudes among employees in an organization (Hooi, 2024). In addition, HRM practices contribute to strengthening the company's human resource pool and motivating employees to achieve its goals (Mathushan & Kengatharan, 2022). On the other hand, HRM practices influence individual and organizational culture and values, which stimulate people to adopt CE behaviors and create ideas, solutions, and new knowledge (Elia et al., 2017). Furthermore, HRM practices involve policies and actual actions designed to attract, develop, motivate, and retain potential employees intended to create a competitive advantage and achieve organizational goals (Lei et al., 2021). Schmelter et al. (2010) argue that the design of HRM practices should be in line with key CE dimensions to foster entrepreneurial thinking, orientation, and activity within employees, thereby creating and nurturing CE activity. On the other hand, both financial and non-financial rewards are necessary to enhance employees' motivation and attitude toward entrepreneurial activities (Hughes & Mustafa, 2017).

Previous research showed that HRM practices play a significant role in fostering and maintaining high levels of CE (Schmelter et al., 2010). Morris and Jones (1993) identified HRM practices influencing CE within an organization including performance appraisal, compensation, orientation and training, recruitment and career development, and job design. Hornsby et al (1999) identify five success factors linking HRM practices to CE including appropriate use of rewards, the provision of management support for innovation, the availability of resources, conducive organizational structure, and individual risk-taking. Schmelter et al. (2010) found that HRM practices of staff selection, staff development and training, and staff rewards are important for firms to induce CE. HRM practices such as selection, training, performance appraisal, compensation, and career development practices support CE (Hayton, 2005). Studies have also suggested reward and compensation systems as key human resources practices that contribute to the emergence of CE (Castrogiovanni et al., 2010). Similarly, Hooi (2024) supports that compensation and rewards are crucial in influencing CE. Tseng and Tseng (2019) argue that training and development are essential for CE which enhances employees' ability to respond and adapt to new challenges. Prior research suggests that appropriate HRM practices in line with recruitment, performance evaluation, and rewards are necessary to enhance the capabilities and motivation of employees for entrepreneurial initiatives (Tang et al., 2015). To this end,

this paper intends to explicate the different role of HR practices that take place in state-owned enterprises of developing countries to enhance various entrepreneurial initiatives and nurture CE.

#### **4.2.2 HRM practices in the airlines industry**

In the fast-paced and dynamic landscape of aviation industry, CE is significant in shaping the success and sustainability of organizations through innovative imperatives. For the implementation of CE, the role of HRM practices is pivotal component that profoundly influences an organization's ability to adapt and thrive in this dynamic environment (Mızrak, 2023). CE enables firms to respond with agility and proactiveness to a rapid technological change by delivering flexible innovative solutions (Urban & Mgwenya, 2024).

The airline industry is predominately based on a skilled and efficient workforce. In this regard, HRM plays a paramount role in ensuring the functions of aviation operation including the recruitment, training and development, engagement, and retention of employees. HRM practices play a vital role in the aviation industry, as they are essential for managing a diverse and skilled workforce critical to ensuring smooth operations (Harvey & Turnbull, 2020). HRM practices significantly impact on an organization's ability to attract and retain talent, thereby determining the efficiency and productivity of aviation operations (Mızrak, 2023). HRM practices can influence customer satisfaction due to improvement of productivity and quality of service which can result in increased financial performance (Parast et al., 2010). Furthermore, HRM practices are important determinants of organizational effectiveness in a highly competitive environment (Schmelter et al., 2010).

The application of CE in public sector organization is limited considering the highly restrictive regulatory public sector environment and constricting mandate guiding public institutions in emerging markets (Urban & Mgwenya, 2024; Gil-López et al., 2022). The airline industry's stringent regulatory environment which is governed by aviation authorities' international civil aviation organization (ICAO), also shapes HRM practices in terms of training, licensing and safety compliances among others (Mızrak, 2023). HRM practices can create an enabling environment for technological innovation through

improvements and changes in working conditions and through training (Seeck & Diehl, 2017).

The role of context specific HRM practices appears important for fostering CE in existing organizations (Seeck & Diehl, 2017). Cooke (2018) noted the importance of context in making sense of HRM practices and their likely effect. Context provides insightful information concerning organizational and environmental setting, history or conditions influencing the situation, within which a particular organizational phenomenon is being examined. In this regard, HRM practices need to be consistent with organizational context including its organizational strategy (Seeck & Diehl, 2017). Alignment of HRM practices with the company's strategy contributes to shaping up organizational attitudes, behaviors and cultural determinants that in turn are conducive to better corporate entrepreneurship activities (Moustaghfir et al., 2020).

Previous studies showed that the airline industry has struggled with various challenges due to seasonal demand, high labor/capital, fuel intensity, and government interventions (Parast et al., 2010). It is important to identify internal factors that contribute to the performance of the airlines. With this context, HRM practices play a significant role in facilitating CE in the airline industry to be competitive in the environment. Furthermore, understanding the different contextual factors affecting HR practices for CE is deemed vital for the success of the airlines in the industry.

## **4.3 Method**

### **4.3.1 Research approach**

I used a qualitative research approach to answer why and how research questions (Yin, 2011) on understanding the role of HRM practices to facilitate CE in state-owned enterprises. Thereby, it focuses on how these practices are adapted to foster an entrepreneurial culture within the organization. I selected the single case study approach (Pettigrew, 1990), to develop in-dept understanding of our research question in context. Ethiopian airline is selected as a single case study to explore the role of HRM practices for facilitating CE in state-owned enterprises in a developing country context. A purposive sampling was used to select the case (Eisenhardt, 1989), considering the following criteria. First, Ethiopian airline is the largest state-owned enterprises found in a developing country. Second, Ethiopian airlines is one of the state-owned enterprises that contributes the most

to employment opportunities for a nation. Third, Ethiopian airlines is also the center of aviation training for most African countries. Taken together, these selection criteria provide excellent conditions to explore the phenomenon under study.

#### **4.3.2 Data collection**

The study employed semi-structured interviews that enable me to gather in-depth data. I conducted interviews with HR managers, HR professionals, managers and senior experts in business development and R&D innovation hubs, totaling 18 interviews (see **Table 4.1**, in Appendix). The interviews were designed to explore the perspectives, experiences, and insights of these stakeholders regarding HR practices and their role on corporate entrepreneurship within Ethiopian Airlines. Utilizing semi-structured interviews allows for flexibility in questioning, enabling the exploration of emergent themes and in-depth understanding of participants' perspectives (Creswell & Creswell, 2017). An interview protocol was derived from recent literature to ensure relevance and depth on the main areas of HRM practices that allows a conducive environment for CE whereby featuring topics and questions that cover contextual factors affecting HRM practices for CE.

All the participants were asked the same base questions while also allowing for further illustrations and additional probing to explore specific responses. The interviews were recorded using an audio recording device and were initially conducted in Amharic to use the mother-tongue of the respondents. The recordings were thereafter transcribed and translated into English. The interview participants were selected due to access to information which helps to develop an understanding of the role of HR practices for CE in state-owned enterprises. Additionally, field notes were taken during the interviews to capture contextual details and non-verbal cues that may provide further insights into the research topic. Furthermore, I strengthen the data collection with archival material on the role of HRM practices for CE of the company such as press releases, corporate websites, brochures, presentations, and internal documents.

#### **4.3.3 Data analysis**

The data was thematically analyzed to identify the key themes and to illustrate the role of HRM practices for CE and analyze the different contextual factors. Therefore, the study employed thematic analysis to identify and report useful patterns in the response of different participants during the interviews. Initially, the analysis process focused on

reading all the transcripts to familiarize with the data and identify themes drawn from different literatures (Braun & Clarke, 2006). Then, I focused on extracting useful information and grouping this according to themes and patterns to reflect the aim of the study (Braun & Clarke, 2006). Throughout the analysis process, attention was paid to both the breadth and depth of the data, ensuring that all relevant insights are captured and interpreted accurately. Finally, the findings were interpreted in relation to the research questions and objectives. Next, the findings are reported, in a coherent narrative style supported by illustrative quotes from the interviews.

#### **4.4 Findings**

The research findings are presented considering various HRM practices aiming to promote corporate entrepreneurship in state owned enterprises in the case of Ethiopian airlines. We focused on the specific HRM practices which are taking place in the airlines and structured in the findings into the five key themes that emerged from the data with regard to HR policies and procedures, recruitment and selection, training and development, reward and compensation, and performance appraisal.

##### **4.4.1 HR policies and procedures**

In this part of the finding, HR policies and practices are described under two sub-themes labeled *openness, participatory, and collaborative, and strategic alignments*.

###### **4.4.1.1 Openness, participatory and collaborative**

Clear and accessible policies are fundamental for promoting corporate entrepreneurship. This transparency helps employees to understand how their innovative efforts will be assessed and rewarded, fostering a supportive environment for entrepreneurship. Entrepreneurial activities are also evaluated and rewarded according to a well-known policy. An R&D expert stressed:

*“The policy itself is very clear and self-explanatory. Entrepreneurial works are evaluated exactly as stated in the policy. There is active participation of employees. All approved entrepreneurial ideas are rewarded based on the policy”. (R2)*

Moreover, the culture of understanding and adhering to policies is crucial. This cultural embedding of policies ensures that employees inherently understand and follow guidelines that support innovative activities. Furthermore, HR policies and procedures are also found on the portal of the airlines, which can be easily accessed by all employees as the following HR officials explained:

*“Most of the ET policies are more like culture. By that I mean that most employees have learned of them throughout their stay in the organization and know them by heart. The policies are also available on the portal and can be accessed by anyone”. (R12)*

*“Every employee hired in the airlines starting from the first date of his/her hiring using their identification number can easily access the HRM policies and procedures of the airlines on its portal page. They can also understand such policies and procedures from their immediate supervisors”. (R8)*

On the other hand, communication gaps in policy dissemination can hinder effectiveness. In this regard, effective communication strategies are necessary to ensure all employees are aware of and understand the policies, promoting a more inclusive and informed organizational culture. However, one R&D expert expresses doubt on the awareness of the policies and procedures by employees even though they are available on the portal:

*“The policies are available on the company portal. If all employees go on the portal and refer to them it is something I doubt. There is poor communication on the part of HR when it comes to communicating its policies and procedures. The more closely you work with HR, the more you will be aware of the policies. Working far from them, we don't actively try to learn the policies”. (R1)*

#### **4.4.1.2 Strategic alignments**

HR policies and procedures in the airlines are aligned with organizational vision and strategy, creating a structure that facilitates CE. In this regard, one of the themes across the interviews is the alignment of HR practices with the organization's strategic objectives. It emphasizes the importance of aligning HR plans with the airline's business plan, ensuring that HR strategies support broader organizational goals. It also ensures that HR practices

contribute directly to the airline's competitiveness and growth ambitions. Furthermore, the integration of HR policies with the business plan reflects the organizational context's influence on HR practices, ensuring that HR initiatives support broader strategic goals.

*“The HR produces its plan based on the airline's business plan. Our plan is aligned with the objectives put in the organization's business plan. So, when we are implementing the strategy, we are supporting the business. The HR policies and strategies are sourced from the business plan. Our plan is always checked for its adherence to the business plan and is revised regularly by the middle and higher management levels. We do this by using the annually targeted HR strategy plans. It contains all the employees HR and the manager's HR's manger responsibilities too”. (R7)*

Moreover, HRM practices are also aligned with the organizational vision. The overall organizational visions are directed towards achieving the strategic vision of 2035. In this regard, the HR department is devoted to motivating and encouraging employees by incorporating the overall vision of the company into its HR policies and procedures. The emphasis on growth and expansion reflects the business context's influence on HR strategies, with HRM initiatives geared towards enabling organizational success and competitiveness. In addition, ambitious targets set by the organization drive employees to think innovatively.

*“The airline's policies and procedures align with the organizational vision. The vision is to grow and expand. Some of our targets are very stretched. They seem unattainable. To reach these goals and to survive, we need to be ahead in some areas and keep up in others. I believe, the airline has created a conducive environment for that to be possible”. (R10)*

Proper mentoring and coaching are provided for employees intending to consider their tasks in accordance with the mission and vision of the organization. HR demonstrates its responsibility by synchronizing employees' skills through mentoring and coaching in achieving organizational goals. By incorporating entrepreneurial activities into HR functions and promoting skill development through programs like the key performance indicator (KPI) program, HR aligns employees' capabilities with the organization's mission and vision. This is supported by the following informant's reflection:

*“Each employee needs to receive proper coaching and mentoring so they operate towards achieving the mission and vision of the organization. HR is responsible for synchronizing employees’ skills with organizational goals. There are concepts included in the HR’s general function that synchronize entrepreneurship activities. Employees are encouraged to equip themselves with the necessary skills under the KPI program. The Human Capital Development section incorporates entrepreneurship in its functions”. (R17)*

#### **4.4.2 Recruitment and selection**

It is challenging for the airline industry to find qualified personnel in the local market, particularly for specialized roles like pilots in Ethiopia. This forces Ethiopian airlines to apply the strategy of recruiting fresh graduates available in the country and prioritizing training and development to meet organizational needs. Ethiopian airline is choosing to hire young and intelligent people with the right attitude and competency and then invest in training them for the required airline skills. By focusing on candidates’ energy and willingness to learn, HR adapts its recruitment approach to address the scarcity of experienced professionals aimed at building a skilled workforce from available resources. This is illustrated by the following informant’s reflection:

*“...the qualifications we require at the airlines are hard to get in the market. For example, we cannot put out an advertisement for a pilot as there are no training schools in Ethiopia that train pilots. Therefore, we focus on recruiting fresh graduates that are easier to train and develop. During interviews, we focus on their energy and readiness to learn new things. We focus on getting fresh recruits instead of looking for experienced candidates and much focus is given on training and developing them into the type of employees we want”. (R7)*

Moreover, by introducing new employees to the organization's entrepreneurial culture from the outset, HR fosters a sense of ownership and engagement in innovation, aligning HR practices with the organization's entrepreneurial goals. This is a proactive effort of the airlines to cultivate a culture of entrepreneurship among employees, thereby driving innovation and growth.

*“...They encourage employees to participate in innovative activities. Even during induction period, new employees should be informed of the organization’s entrepreneurial practices and encouraged to participate”.*  
(R18)

Moreover, when recruiting top management positions the entrepreneurial characteristics of creativity, drive for action, and autonomy were considered during recruitment process. Candidates are asked to bring new insights into the existing practices and approaches, and they are required to present their plan of execution ahead. This is supported by the following informant’s reflection:

*“...Candidates are requested to come up with ideas that can bring new insight to the existing processes, practices and approaches. They present such ideas and also discuss how they are planning to execute”.* (R6)

HR also plays a role in responding to project requirements by recruiting skilled personnel and organizing training to enhance human capital. This reflects a context-sensitive approach to HR practices, where recruitment and training initiatives are tailored to meet specific project needs and objectives. By aligning HRM practices with project requirements, HR contributes to the organization's ability to execute projects successfully, thereby supporting corporate entrepreneurship through the effective deployment of talent. The focus on aligning recruitment efforts with the organization’s strategic goals enhances the likelihood of fostering an entrepreneurial culture, as skilled and well-trained employees are better equipped to innovate.

*“The HR has a good engagement in bringing in skilled and well-trained personnel to assist in developed projects. Based on project requirements set by the user section, they are active in recruiting and hiring qualified personnel. The HR is also responsible in organizing and training the human capital of the organization”.* (R4)

The airlines focus on recruiting and training well-qualified personnel to support the organization's goals and objectives. In this regard, HR playing a crucial role in ensuring that each department is equipped with skilled manpower to fulfill its duties effectively. By prioritizing the recruitment and training of qualified candidates, HR contributes to the

organization's capacity to innovate and pursue entrepreneurial opportunities. This is further illustrated by the following informant's reflection:

*"...our main objective is to provide a well-trained and experienced staff that can help the organization achieve its goals and objectives. This is done by recruiting the most qualified candidates from the local manpower available, training and placing them.....These candidates can be pilots that fly the planes, maintenance people and also other cabin crew members that are scarce and expensive in the local market. We are tasked with making sure that each department is equipped with qualified and well-trained manpower so they can do their best with their duties". (R7)*

#### **4.4.3 Training and development**

Given the specialized nature of the airline industry and the scarcity of certain skills in the local labor market, training and development emerge as crucial HRM practices. Training helps to develop human capital and allows for competence and knowledge sharing among its employees. On the other hand, training enables that employees possess the skills and expertise necessary to drive innovation and entrepreneurship within the organization. However, the airline industry's complexity necessitates a strategic approach to talent development to meet organizational needs effectively. In this regard, the HR department strives to train and equip the employees to build their capacity through various training as illustrated by this reply:

*"The nature of the airlines industry is complex in its nature and demands trained and experienced experts. The human resource department is entrusted with making sure that these trained and experienced experts are always found within the organization...we use to build employees' capacity through formal training in which employees attend online training and courses. This is related to the employee's career development within the organization". (R6)*

Furthermore, the airlines collaborate with universities to provide educational opportunities for employees, especially for senior management. Collaboration with educational institutions also enhances the workforce's skill set. HR includes partnerships with

international training institutions and develops in-house training programs to build necessary skills not available locally. This partnership with academic institutions is significant to talent development, leveraging external resources to enhance employees' skills and knowledge. Furthermore, by offering opportunities for further education, the organization demonstrates its commitment to stay competitive in the industry. This is further illustrated by the following informant's reflection:

*“The HR supports employees to further develop their education. There are educational opportunities that come from the corporate level, especially for the management, and again especially for the Senior Management. There are universities that work with us in Partnership, like Open UK University, where most of our Senior Management got their education from. There are also other universities that the airline works with in partnership. Addis Ababa Science and Technology University is our innovation partner. These universities give us their offer to educating a certain number of PhD students”. (R5)*

Developing leadership skills that encourage innovation and support entrepreneurial initiatives ensures that managers can effectively guide and nurture entrepreneurial efforts within their teams. Various development courses are developed to improve the effectiveness of employees for better performance. This approach to leadership development shows the organization's recognition of the importance of entrepreneurial skills in driving innovation and competitiveness. By integrating innovation-focused training into leadership programs, the organization aligns HR practices with the industry's demand for innovative leadership. Under management and leadership development strategy, the airline is given training programs such as Management Development Course (MDC) for front line managers, Business Management Course (BMC) for Directors and Executive Development Course (EDC) for executives. This is supported by the following informants' reflection:

*“If you look at the leadership strategies and training modules and the syllabus, most of them focus on innovation and creativity. There is the TLDC- Team Leader Development Course, MDC- Management Development Course, and EDC- Executive Development Course. The courses are designed to encourage creativity and innovation. The syllabus itself is*

*designed to support creativity. Each module-based training is given three times a year. 75 employees in total take the courses with 25 trainees per class”. (R10)*

*“...Leaders are developed before they become top level leaders or managers. These leaders are trained to have good leadership characteristics, business mindset, innovation skills and in other areas over a long period of time before they become top level managers”. (R6)*

Moreover, the airlines invest in employee education, both through partnerships with external institutions like universities and through internal initiatives such as the aviation academy. The establishment of the aviation academy is crucial to develop the capacity of employees. This shows the organization's response to the contextual challenge of meeting international requirements for skilled airline employees. Currently, Ethiopian aviation academy has been upgraded to Ethiopian aviation university, which enable it to provide a broader range of educational programs and increase the level of expertise in the aviation industry. This transformation of the aviation academy into a university also illustrates a long-term vision for human capital development. By providing training to both internal and external stakeholders, the airline demonstrates its commitment to developing a talent pool aligned with industry standards. This is also explained further by the following informants' reflections:

*“Instead of sending employees abroad to get training, the airline builds their capacity through various means. For example, the Aviation Academy has now developed to be the Aviation University now. The airline has created an institution like the Aviation University to build the capacity of its employees, so they meet the aviation vision as well as meet the international requirements for skilled airline employees...The Aviation Academy gives training to different local organizations including government institutions like the Ethiopian Electricity Power Corporation, Banks, and so on. These kinds of organizations come to the Academy to take training on leadership, management, customer service, and the like”. (R13)*

*“...We have aviation university, formerly aviation academy, working with different partners. We train and develop employees with the necessary skills in the aviation university with partnership to deferent stakeholders”. (R8)*

Furthermore, offering training programs that focused on entrepreneurial skills such as opportunity recognition, problem-solving, and project management helps employees develop the capabilities needed for corporate entrepreneurship. The airline recognizes the importance of leadership skills in navigating the complexities of the airline industry. By implementing a structured training program, the organization ensures that leaders possess the necessary skills and characteristics to drive corporate entrepreneurship and organizational success.

*“There are two types of employee training- for managers and other employees. Through training like project management training and budget and cost training, they are introduced to innovative ideas of minimizing cost, transformational leadership to mention a few examples. During project management training they are trained with innovative ideas for managing projects”. (R5)*

Adopting new technologies is important to maintain international competitiveness. However, technological advancement necessitates HR practices focused on equipping employees with the necessary skills and knowledge. Due to the complex nature of the airline industry, ongoing training is required to keep employees up to date with the latest technologies and operational methods. Employees receive training to improve their competencies, which is crucial for fostering a skilled workforce capable of driving innovation. This involves bringing in external trainers and encouraging continuous learning among employees, aligning HR practices with the industry's dynamic context. The following informant explained this as follows:

*“The airline is trying to stay competitive internationally. This means they must be able to adapt to new technologies immediately and move to implementation. They bring in trainers from other airlines and we have experts here who train us. The airline sends employees from here to take training elsewhere and come back and train the rest of us here. Equipping employees in their respective areas of work with proper skill and knowledge*

*would make the work more active and flawless. It also encourages employees to learn on their own as well”. (R9)*

#### **4.4.4 Reward and compensation**

It is important to have a clear procedure in place to promote creativity and innovation within the organizational structure. The reward system aims particularly to attract and motivate employees, while gaining and promoting their loyalty. The airlines support entrepreneurial endeavors, with dedicated mechanisms for recognizing and rewarding innovators. By embedding innovation and creativity within the organizational structure, HR contributes to creating a conducive environment for corporate entrepreneurship as the following informants explained:

*“...there is a clear procedure that is put in place to promote creativity and innovation embedded within the organizational structure with a separate body assigned to make sure it is promoted, and the innovators are rewarded accordingly”. (R7)*

*“...Employees are rewarded for their innovative ideas. The organization does encourage employees to bring forward their ideas”. (R3)*

Moreover, it is also important with supportive leadership to foster employee engagement and encourage entrepreneurial behavior. By recognizing and rewarding innovative ideas at the Group CEO level, the organization demonstrates a top-down commitment to promoting entrepreneurship. This contextualized approach to recognition and reward reinforces the organization's entrepreneurial culture and encourages employees to actively contribute to innovative efforts. Furthermore, employees who can bring new initiatives and ideas are recognized and rewarded to the extent of their contributions to saving costs or share profits.

*“Employees are engaged. To engage them more, entrepreneurial and innovative ideas are recognized and rewarded at the Group CEO level. Employees rush to grab such opportunities by identifying problems and coming up with solutions that can benefit the organization”. (R10)*

*“...Such Programs are designed to help employees come up with new initiatives. People who can bring new feasible ideas are always recognized & rewarded- to the extent of sharing profits or saved costs”. (R6)*

Effective communication and awareness about the rewards and bonuses provided to employees are also significant to promote entrepreneurial initiatives. By providing platforms for employees to share ideas and initiatives, the organization facilitates collaboration and knowledge sharing, fostering a culture of innovation. The creation of the platforms like “My idea” facilitates idea-sharing and collaboration among employees and promote social integration whereby the organization benefits from diverse perspectives and ideas, driving creativity and problem-solving across departments. HR’s role in collecting and implementing ideas from these platforms highlights its commitment to leveraging employee creativity to drive corporate entrepreneurship. This is described further by the following informant’s reflection:

*“Rewards and bonuses for innovative ideas are also clearly communicated even though that isn't the first reason why employees get involved in innovative activities. Employees don't really spend time calculating how much they would get by inventing something. Rather, they do it to help the organization. There is an awareness creation activity like creating the platform ‘My Idea’ and the monthly core meetings, where employees can share their new ideas and new initiatives. The HR collects information from the monthly core meetings of each department and takes assignments based on them”. (R14)*

Furthermore, employees are encouraged to proactively identify and solve problems, driving continuous improvement and enhancing the organization's competitive position in the market. There is recognition and reward system for cost-effective innovative ideas at corporate level in the airlines whereby entrepreneurial behavior contributes to cost savings and operational efficiency. Entrepreneurial initiatives aligned with strategic objectives are prioritized for recognition and reward. In addition, the airline supports and encourages innovative ideas that are aimed at cost reduction.

*“Innovative ideas that are found to be cost-effective are awarded at corporate level. For example, if someone comes up with an idea of*

*minimizing the cost of the maintenance of aircrafts, then the inventor of the idea is awarded. There are recognitions every 6 months or annually. Employees do get rewards for their cost-saving ideas”. (R11)*

*“...the Airlines plans support and promotes new ideas. It supports people with cost reduction ideas as the airline business has a lot of costs involved. It rewards people who come up with new ideas that will help it reduce its cost after they are implemented and found to be effective”. (R6)*

Moreover, the airline rewards employees for innovative ideas and cost-saving initiatives, demonstrating a commitment to fostering a culture of innovation. However, concerns are raised about the adequacy and fairness of these rewards, suggesting a need for ongoing evaluation and adjustment of incentive structures to ensure their effectiveness in driving entrepreneurial behavior. In this regard, the following informants replies that the fixed reward amount may not sufficiently motivate employees to pursue innovative ideas, particularly if the potential impact of these ideas far exceeds the reward offered. This highlights the importance of aligning reward systems with the value and impact of innovative contributions, thereby ensuring that employees are adequately incentivized to engage in entrepreneurial activities.

*“We do have a reward system in place. It became a fixed amount at some point. Is there a fixed amount to a real reward is a question I have? The reward used to be a certain percentage of the innovation, but later it was fixed to 40,000birr. How motivated would an employee be if he/ she was awarded 40,000 birr for a project that they designed that helps the company save millions of dollars. I doubt they would be motivated enough. Some sort of amendment is important...It's not fair and motivating enough if you are saving the company from spending in millions”. (R5)*

#### **4.4.5 Performance appraisal**

Performance appraisal is crucial to align employee responsibilities with organizational objectives. It involves supervising and monitoring employees' performance while relying on specific objectives and key performance indicators (KPIs). This enables that employees

are aware of HR policies and procedures, fostering accountability and performance improvement throughout the organization.

*“The responsibilities of each employee and manager are related to their monthly performance evaluations, which creates awareness in all employees and managers in the form of KPIs (Key Performance Indicators). We have embedded our standards into the monthly performance evaluations. This makes sure that all our employees are aware of the HR policies and procedures”. (R7)*

In the airlines, there is a clear definition of HR processes and the implementation of performance improvement plans. Such performance management procedures allow for a better alignment between employees' activities and the company's strategic and operational plans. Furthermore, performance management shows the organization's commitment to supporting employees in achieving competence in their roles, thereby contributing to CE through enhanced individual performance. A performance management system that includes improvement plans and training program for the performance gap identified, indicating a system that fosters employees to become competent in their positions. This is also explained by the following informant's reflection:

*“Each and every step of the HR process is clearly defined with all its requirements. Based on those requirements, training is given to employees at the aviation as well as elsewhere if needed. The performance management system has a performance improvement plan in place. In case there are performance gaps identified, with the support of the management, employees receive different education and training, so they become competent in their positions. There are organized systems in place”. (R13)*

Moreover, Key Performance Indicators (KPIs) is used as a pivotal mechanism, linking performance to financial bonuses. This incentive system aligns employee efforts with organizational goals, encouraging entrepreneurial behavior by rewarding performance that exceeds the expected targets as one of the following informants replied. In addition, attempts that enhance organizational efficiency and effectiveness through innovation and creativity are considered as part of the KPI as the other informants replied.

*“...we do have a system in place that encourages employees for their innovative works. We have KPI system. We review our target annually as well as semester level. We work towards meeting those targets. When we exceed the target, there is the KPI system that rewards employees with financial bonuses. I believe that is one way of encouragement”.* (R1)

*“...any attempt done on enhancing efficiency and effectiveness through innovation and creativity is part of the performance appraisal KPI”.* (R6)

Furthermore, another interviewee explains the impact of performance evaluation systems on employee productivity, highlighting the challenges associated with the 20-70-10 system where 20% are the highest performers, 70% are the middle performers and 10% are the lower performers. The interviewee emphasizes the importance of HR practices that foster collaboration and trust between employees and management, thereby enabling corporate entrepreneurship through a supportive organizational culture. However, the interviewee highlights the "recency effect" on performance assessments, where short-term performance overshadows consistent hard work throughout the year. This inconsistency can lead to frustration among employees, who may feel that their contributions are undervalued, and it affects their productivity as the informants explained more:

*“...the main task of the HRM is creating link between employees and their employers...Many employees work hard throughout the year. When the performance evaluation season arrives, supervisors find faults and some workers pretend to work hard trying to take advantage of the recency effect. The 20-70-10 system forces managers to assign 20% of members of their staff as high performers, 70% as middle performers and 10% as low performers. This kind of new system creates problems between the management and non-management staff that have been working for many years in agreement. It directly affects the productivity level of employees”.* (R11)

#### **4.5 Discussion**

CE is essential for the success of an organization in a dynamic environment. For implementing CE, HRM practices are crucial component that profoundly influences an organization's ability to adapt and thrive in this dynamic environment (Mızrak, 2023). This paper explored the role of HRM practices for CE in state-owned enterprises and how

the different contextual dimensions affect HRM practices for the successful implementation of CE. The results show that Ethiopian airline demonstrates a commitment to align HRM practices with the overall business objectives, highlighting that the initiatives are supportive of the organization's strategic priorities. This strategic alignment ensures that HRM practices are aimed towards driving CE and innovation in areas that are critical for the success of the airlines. Additionally, the strategic alignment of HRM practices with business goals highlights that human capital effort is directed towards enhancing the company's competitiveness and growth. This finding is similar with Tang et al. (2015), who found that strategy-aligned HRM practice helps to improve an organization's performance through the implementation of CE. They highlight the importance of strategic HRM practices in fostering an entrepreneurial culture within organizations. In this regard, considering the dynamics environment of the airline industry conditions in which it operates, implementing strategically aligned HRM practices that foster CE represents the driver of business success (Moustaghfir et al., 2020).

Furthermore, providing opportunities for employees to participate in entrepreneurial activities reinforces a sense of ownership and empowerment. This results that employees feel valued and empowered to contribute their ideas and initiatives to drive corporate entrepreneurship forward. Openness in HR policies and procedures is essential not only for fostering CE activities but also for establishing a conducive work environment that supports other resource management practices aimed at stimulating entrepreneurial behaviors (Castrogiovanni et al., 2011). In this regard, the firm's openness of HRM policies and procedures towards the entrepreneurial behavior of their employees is the necessary condition for promoting and nurturing CE. The finding highlights that the airline's HR policies and practices contribute to CE by encouraging employees to participate in creative processes and prioritize innovation and impacts on financial performance. Even if the policies are conducive to entrepreneurship, the lack of awareness or access to these policies may still limit their effectiveness. This needs transparent communication and awareness creation to ensure that all employees understand and leverage HR policies and procedures to engage in entrepreneurial activities.

Ethiopian airlines recognizes the importance of investing in the continuous training and development of its workforce to stay competitive in the dynamic aviation industry. In consistent with prior research (e.g. Castrogiovanni et al. 2011; Hayton, 2005; Shehata et al. 2021), this study finding highlights that training and development as HRM practice

allows firms to educate their personnel on how to become innovative and creative to meet challenges in a competitive and dynamic environment. However, in a developing country context, this takes new shapes due to lack of recruitment options. The context of the aviation industry demands highly skilled and experienced personnel. In this regard, training and development practices can foster entrepreneurial behavior when they are designed to be applicable across various job roles and actively involve high levels of employee participation (Castrogiovanni et al., 2011). It is also known to encourage entrepreneurial behavior of employees that focus on developing their knowledge, skills, and capabilities in existing organizations (Schmelter et al., 2010; Tang et al., 2015). The finding shows that the airline's commitment to providing extensive training and development opportunities, both internally and through partnerships with educational institutions, is critical for building a competent workforce capable of meeting industry demands. This focus on employee development equips staff with the skills and knowledge needed to drive innovation and entrepreneurship within the established organization. On the other hand, the finding shows that the scarcity of specialized local talent, such as pilots, forces the airline to develop robust training programs in its aviation university. This results in a strategic HR approach to create in-house training programs that build the necessary skills locally, enabling a consistent pipeline of qualified personnel. Furthermore, the airline places significant emphasis on continuous professional development through specialized programs at its Aviation University, as well as on-the-job learning experiences. Continuous professional development ensures employees to acquire the skills and knowledge necessary to contribute to the airline's entrepreneurial initiatives.

Moreover, the result show that Ethiopian airlines apply the strategy of recruiting fresh graduates and prioritizing training and development to meet organizational needs. By doing so, Ethiopian airlines enables that its employees are equipped with the skills and knowledge needed to succeed in their roles and drive innovation within the organization. Furthermore, by developing local talent, Ethiopian airlines address the immediate staffing needs but also contributes to building a skilled workforce that can drive broader economic development. The emphasis on collaboration, continuous learning, and a supportive environment for innovation is seen in the initiatives described by various interviewees. For example, the result shows that the encouragement of employees to participate in innovative activities from the outset fosters a culture where entrepreneurship is valued and actively promoted. A firm can create and sustain a competitive advantage by strategically

leveraging a highly skilled and dedicated workforce through integration of cultural, structural, and HR strategies (Shehata et al., 2021). By promoting creativity, recognizing innovative ideas, and providing platforms for employees to share their insights, organizations can stimulate entrepreneurship at all levels.

On the other hand, recognition and reward systems play a crucial role in encouraging entrepreneurial behavior within Ethiopian airlines. The finding emphasizes the importance of acknowledging and rewarding employees for their innovative ideas and contributions to the organization. HRM practices require organizations to offer better compensation not only to attract and retain competent employees but also to inspire them to achieve organizational objectives (Shehata et al., 2021). Such practices foster high performance, productivity, and improved employee morale, thereby contributing to sustainable organizational success. Furthermore, reward and compensation systems are pivotal HR mechanisms for fostering corporate entrepreneurship within organizations (Castrogiovanni et al., 2011). The reward demonstrates the organization's commitment to seeking entrepreneurial behaviors in various forms such as financial (bonuses), motivational (awards), relaxation (paid time off), or personal stake (Kuratko et al., 2023). Rewards also help employees feel recognized and appreciated for their efforts, thereby contributing to increased employee responsibility and performance (Edwards et al., 2023). The reward system that the organization uses should be based on entrepreneurial activity and success (Kreiser et al., 2021). However, the findings show that there are concerns raised about the adequacy of the rewards offered, suggesting that the current reward structure may not sufficiently motivate employees to pursue innovative initiatives. Therefore, the effectiveness of reward systems in motivating employees for innovation and entrepreneurship should be regularly evaluated. In addition, it is important to align rewards with the significance of innovation, ensuring that employees feel adequately recognized for their contributions.

Furthermore, the result also revealed on Ethiopian airlines' performance management systems and their impact on corporate entrepreneurship. While some interviewees emphasize the use of key performance indicators (KPIs) and performance evaluations to motivate employees and reward entrepreneurial behavior based on their performance, others criticize the rigid nature of the 20-70-10 evaluation system. These differing perspectives show the complexity of performance management in fostering corporate entrepreneurial initiatives, with some employees feeling demotivated by overly

prescriptive evaluation criteria. In this regard, regular feedback on individual and team performance offers essential insights to bridge the gap between expectations with actual outcomes, whereby enhancing work quality and fosters innovation (Khan et al., 2014). These mechanisms are important for improving and sustaining corporate entrepreneurial culture within the organizations. A performance appraisal system that emphasizes developmental feedback and recognizes diverse contributions would be more conducive to fostering an entrepreneurial mindset among employees. Research indicates that flexible appraisal methods that focus on individual strengths and contributions can enhance employee engagement and motivation (Pulakos et al., 2015). Furthermore, an effective performance appraisal system reflects organizational strengths and weaknesses and facilitates continuous advancement and a pathway for corporate entrepreneurship initiatives (Ahmad et al., 2016).

Moreover, the finding demonstrates how contextual dimensions in terms of business, spatial, social, institutional, organizational, and ownership contexts play a critical role in determining the success of HRM practices to enhance CE at Ethiopian airlines. In the *business context*, the airline industry is highly competitive and dynamic, with pressures to innovate, reduce costs, and improve efficiency. Ethiopian airline operates in an environment within rapid technological advancements, changing customer expectations, and the need to maintain a competitive edge, making CE a critical success factor. Consequently, the airline's HRM practices are focused on developing a workforce that can navigate these challenges. By recruiting and training individuals with entrepreneurial skills and fostering a culture of innovation, Ethiopian airlines aim to sustain its market leadership, particularly in Africa and the rest of the world. On the other hand, the *spatial context* includes the geographic and environmental factors that impact Ethiopian airlines. Operating in Ethiopia, within its growing economy and geographically positioning within Africa, the airline has unique opportunities for expansion, especially within the African and international markets. The airline's HRM practices are shaped by these opportunities, as they must prepare employees to handle both domestic and international operations. This includes training programs to improve cross-cultural competencies, leadership skills, and the technical expertise needed to manage a global network. In this regard, the findings reveal that Ethiopian airline has invested in internal capacity building through the Ethiopian aviation university, which reflects its efforts to address spatial challenges by building local talent while maintaining international standards.

The *social context* in which Ethiopian airline operates is affected by Ethiopia's socio-cultural norms, values, and social structures. The airline has been successful in promoting a sense of collective ownership among employees, encouraging them to contribute ideas to improve operational efficiency. As the findings show, HRM practices, such as empowering employees to take risks, providing incentives for innovation, and cultivating leadership that encourages open communication, are essential in overcoming these social challenges. The *institutional context* in which Ethiopian airline operates is influenced by both national and international regulations, industry standards, and the broader political environment. As a state-owned enterprise, Ethiopian airline is influenced by government policies, state regulations, and public-sector management practices. Institutional factors such as bureaucratic procedures, regulatory frameworks, and government priorities can either foster or hinder entrepreneurial initiatives. HRM practices, such as empowering employees, providing them with the autonomy to make decisions, and establishing innovative frameworks, are necessary to mitigate institutional challenges and encourage entrepreneurial activity within the constraints of the institutional environment.

At the *organizational context*, Ethiopian airline is characterized by a culture of professionalism and operational excellence, which is embedded within its organizational structure and practices. The finding shows the airline's HRM practices are aligned with its strategic goals of maintaining high standards in safety, customer service, and operational efficiency. These organizational priorities necessitate HRM practices that balance both routine operational excellence and the need for innovation. In this context, HRM practices focus on creating a workforce that is both highly skilled and capable of contributing to entrepreneurial initiatives. On the other hand, Ethiopian airlines' state-owned status constitutes an *ownership context* that significantly influences its HRM practices for corporate entrepreneurship. State ownership typically brings with it a unique set of challenges related to political interference, slower decision-making processes, and a focus on stability rather than risk-taking (Gil-López et al., 2022). However, Ethiopian airline has managed to reduce some of these challenges by operating with a degree of autonomy within the Ethiopian government's broader economic framework. The airline's leadership has demonstrated a commitment to entrepreneurship by implementing business strategies that emphasize innovation and expansion, such as its focus on becoming a pan-African carrier and expanding its route network.

Compared to private firms, state-owned enterprises have more access to resources that enable them to develop innovation capability, but they lack efficiency in utilizing the resources successfully (Chang et al., 2019; Zhou et al., 2017). This study offers insights by investigating the role of HRM practices to facilitate CE in state-owned enterprises through effective utilization of the available resources. Unlike private firms, state-owned enterprises in developing countries required adaptive HRM practices that can operate within bureaucratic rigidity and limited financial resources. For example, Ethiopian airlines established its own aviation training academy and trains pilots, engineers, and cabin crew, creating a pipeline of skilled personnel aligned with the airline's strategic goals. This creates an opportunity to utilize the available resources and an adaptive response to the limited financial resources of the state-owned enterprises. Furthermore, Ethiopian airlines demonstrates that even within a highly regulated and state-controlled environment, strategically designed HRM practices serve as critical enablers of CE.

#### **4.6 Conclusion**

This study explores the role of HRM practices in fostering CE in state-owned enterprises of a developing country context through the case of Ethiopian airlines, whereby focusing on how these practices are adapted to foster an entrepreneurial culture within the organization. The study addresses various HRM practices including HR policies and procedures, recruitment, reward and compensation, training and development, and performance appraisal that can facilitate and promote CE in state-owned enterprises of a developing country context. The role of HRM practices for fostering CE is understood through the influence of various contextual dimensions, such as business, spatial, social, institutional, organizational, and ownership contexts. These shapes how HRM practices are designed and implemented to foster an entrepreneurial mindset and behavior among employees. Each context presents a unique challenges and opportunities for fostering CE within Ethiopian airline, and the HRM practices should be aligned within these contexts to drive innovation and adaptability.

This study presents a number of implications and contributions. First, HRM practices should be aligned with the broader strategic goals of the organization including its innovation and entrepreneurial activities. For state-owned enterprises, particularly those that operate in competitive and fast-changing industries, HRM practices must consider maintaining organizational stability and fostering entrepreneurial agility. Second,

improving a culture of innovation through the recognition and rewarding of creative ideas stimulates CE at all levels. Third, investment in training and development, both internally and through partnerships with educational institutions, is essential to meet the demands of the aviation industry. Additionally, clear communication of HR policies and procedures is essential for fostering employee engagement and involving employees in the development of these policies can also enhance their commitment and understanding. Finally, the study highlights the importance of contextual sensitivity in HRM practices, acknowledging and addressing the specific challenges posed by business, spatial, social, institutional, organizational, and ownership contexts is key to the successful implementation of HRM practices for fostering and nurturing CE.

The study is subject to limitations that give rise to opportunities for future research. It is based on a single case study of Ethiopian airlines, a state-owned enterprise in Ethiopia. However, focusing on one organization may limit the analytical generalizability of the findings to other state-owned enterprises in developing countries of different sectors, countries, or regions. Future research could use multiple case studies to investigate the role of HRM practices for CE across different state-owned enterprises and industries and countries to further extend the findings.

On the other hand, given the rapidly changing dynamics of the global aviation industry and the ongoing shifts in government policies and institutional frameworks, the HRM practices that currently support CE at Ethiopian airlines may evolve in the future. In this regard, this study does not account for potential long-term changes or adjustments in these practices that could influence CE over time. Therefore, longitudinal research that tracks the evolution of HRM practices and CE at Ethiopian airlines would provide valuable insights into how entrepreneurial behavior and HRM practices adapt to shifting organizational, economic, and political conditions. Such studies could shed light on the long-term impact of HRM practices on the sustainability of CE initiatives and their influence on the organization's overall performance.

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## Appendices

**Table 4.1:** Overview of interviews

Interview	Respondent	Department	Date	Length
1	R1	R&D	2023-03-19	20:49 min
2	R2	R&D	2023-03-13	48:08 min
3	R3	Business Development	2023-03-19	28:16 min
4	R4	Business Development	2023-03-13	25:07 min
5	R5	R&D	2023-03-13	32:10 min
6	R6	HRM	2023-09-20	40:00 min
7	R7	HRM	2023-09-20	38:53 min
8	R8	HRM	2024-07-22	28:41 min
9	R9	HRM	2024-07-22	31:24 min
10	R10	HRM	2023-03-15	39:35min
11	R11	HRM	2022-09-22	28:16 min
12	R12	HRM	2023-03-15	35:59 min
13	R13	HRM	2023-09-23	34:56 min
14	R14	HRM	2023-09-23	37:19 min
15	R15	HRM	2023-10-12	26:21 min
16	R16	HRM	2023-10-13	30:04 min
17	R17	R&D	2022-09-19	35:45 min
18	R18	R&D	2022-09-22	24:32 min

## **CHAPTER 5: GENERAL DISCUSSION, CONCLUSION AND IMPLICATIONS**

### **5.1 General Discussion**

This dissertation explores how CE unfolds in state owned enterprises in a developing country context. It highlights the role of context in CE research and seeks to broaden our understanding of how CE unfolds in state-owned enterprises through innovation outcomes and addresses the role of HRM practices to facilitate and nurture CE in existing organizations. The dissertation comprises of three independent yet interrelated research papers. Paper 1 of this dissertation (see chapter 2) mapping the systematic review of CE, analyzed and discussed 214 published articles on top tier journals over the period of 1985-2023. It emphasizes the importance of understanding the various contexts in which CE unfolds, highlighting the role of context in CE research. By recognizing the internal and external enablers of entrepreneurial opportunities, organizations can tailor their strategies to better fit their specific environments, leading to more effective CE activities. Furthermore, the paper integrates the domain of corporate entrepreneurship with multiple contextual dimensions of entrepreneurship, including business, spatial, social, institutional, organizational, and ownership contexts. Each of these dimensions plays a distinct role in shaping how corporate entrepreneurship is enacted within organizations.

The input-process-output framework developed in this review paper provides a foundation for future research to examine how CE activities evolve across different contextual dimensions. The input part of the model comprises the external and internal enablers that facilitate firms' identification and exploitation of entrepreneurial opportunities to engage in different CE activities. The process phases of the model explain the procedural aspects of how entrepreneurial opportunities trigger entrepreneurial behavior that leads to CE including corporate strategy and human resource-related aspects to reveal how these aspects facilitate entrepreneurial actions. The output phase of the framework illustrates the outcomes of CE activities, specifically in the areas of corporate venturing, innovation, and strategic renewal. An important finding of the paper is that the role of context in the corporate entrepreneurial process has been largely overlooked in existing literature. Therefore, the finding highlights that understanding the various contextual dimensions is crucial for a comprehensive understanding of CE activities and their outcomes. Each of these dimensions influences the input, process, and output phases, highlighting the need to contextualize CE activities to understand their dynamics. Thus, this contextualization is vital for advancing research and practice in corporate entrepreneurship. This review paper

lays out the foundations on conceptual overview of CE that supports the empirical research presented in paper 2 and 3 of the dissertation (see chapter 3 & 4).

Paper 2 of the dissertation (see chapter 3) focuses on the pursuit of CE in state-owned enterprises through innovation outcome. It investigates how CE unfolds in state-owned enterprises through innovation practices in a developing country context through the case of Ethiopian airlines. Furthermore, it highlights how contextual dimensions (business, spatial, social, institutional, organizational, and ownership context) jointly affect the pursuit of CE through innovation outcomes under such conditions. The findings described the input and process leading to two outcomes of innovation. The first innovation output concerned converting passenger seats into cargo freighters during Covid-19. The airline's ability to shift passenger aircraft to cargo freighters during the Covid-19 pandemic exemplifies adaptive innovation in a turbulent business context. This showcase illustrates how the airlines as state ownership can act entrepreneurially when faced with crisis, leveraging internal capabilities to develop timely and innovative solutions.

The second innovation outcomes concern the sustainability initiatives involving the collaboration with farmers' cooperatives to source locally produced products in the airline's catering services. The finding shows that the airline's initiative to source local agricultural products for in-flight catering results in saving foreign currency, supporting local farmers' cooperatives and reduces the need for imported goods. Additionally, it promotes the airline's community development and sustainable practices. Furthermore, the result describes the influence of different contextual dimensions on the innovation outcomes of corporate entrepreneurship. The finding also shows that state-owned enterprises can effectively engage in CE through innovation outcomes to remain competitive in a dynamic environment. The study highlights the importance of contextual adaptation in CE. By tailoring external ideas and technologies to fit the specific operational context, state-owned enterprises can ensure practical and effective innovations. It has been shown that CE can extend beyond financial performance to include significant socio-economic contributions.

Paper 3 of this dissertation (see chapter 4) investigates the role of HRM practices for CE in state owned enterprises in a developing country context through the case of Ethiopian airlines, highlighting on how these practices are adapted to foster an entrepreneurial culture within the organization. The finding emphasizes that HRM practices in state-owned

enterprises play a crucial role in facilitating CE by fostering an environment that encourages employees to participate in innovative activities. The ability to attract, develop, and retain talent is essential for ensuring that employees possess the necessary skills and motivation to contribute to entrepreneurial initiatives within state-owned enterprises.

Ethiopian airlines recognize the importance of investing in the continuous training and development of its workforce to stay competitive in the dynamic aviation industry. The finding shows that the airline's commitment to providing extensive training and development opportunities is critical for building a competent workforce capable of meeting industry demands. In this context, through training and developing local talent, Ethiopian airline contributes to building a skilled workforce that can drive broader economic development. Furthermore, the findings highlight the importance of recognizing and rewarding employees for their innovative ideas and contributions to the organization. The finding also highlights the importance of contextual sensitivity in HRM practices, considering the specific challenges posed by business, spatial, social, institutional, organizational, and ownership context is key to the successful implementation of HRM practices for fostering CE.

Generally, this dissertation underscores the need for further research on ownership, particularly state ownership, and their influence on corporate entrepreneurship. While much of the existing literature focuses on private-sector firms, there remains a gap in understanding how state-owned enterprises drive entrepreneurial activities within regulatory, political, and institutional constraints. The dissertation highlights the necessity of investigating CE within state-owned enterprises, especially in contexts where these entities play a significant role in national economies. Additionally, the dissertation highlights the importance of studying CE in the Global South, particularly in countries like Ethiopia, where state owned enterprises play a significant role in economic development. Thus, investigating CE in these contexts can provide valuable insights into the unique challenges and opportunities that state-owned enterprises face, thereby broadening theoretical and practical understanding of corporate entrepreneurship in developing countries.

## **5.2 Conclusion**

This dissertation addresses the role of context in CE research and highlights the pursuit of CE in state owned enterprises through innovation outcomes and investigates the role of

HRM practices to foster and nurture CE, whereby such practices are adapted to foster entrepreneurial culture in established organizations. CE is vital for the competitiveness and sustainability of state-owned enterprises in developing countries. By leveraging internal resources, fostering a culture of innovation, and adapting to competitive pressures, state-owned enterprises like Ethiopian Airlines can navigate complex environments and achieve long-term success. The finding of this dissertation illustrates how CE unfolds in state-owned enterprises in a developing country context, whereby highlighting the role of context in CE research. The dissertation contributes to a growing body of knowledge that recognizes the unique dynamics of CE in state-owned enterprises and offer practical insights for organizations and policymakers seeking to enhance entrepreneurship in the public sector. More importantly, it stresses the necessity of expanding research on state ownership, particularly in the Global South, to build a more comprehensive and context-sensitive understanding of CE.

### **5.3 Theoretical and Practical contributions**

#### *Theoretical contribution*

This dissertation advances the theoretical understanding of context in CE by highlighting CE in state-owned enterprises of developing countries. The dissertation stresses the importance of understanding the various contextual influences on CE activities. It argues that different contexts—such as business, spatial, social, institutional, organizational, and ownership—affect how CE is enacted within firms. This perspective advances theoretical frameworks by integrating context as a critical variable in CE research. The dissertation (see chapter 2) proposes a conceptual model that organizes existing literature and identifies research gaps. This framework can guide future studies, helping researchers focus on the contextual dimensions of CE, such as business, social, spatial, institutional, organizational, and ownership contexts. This structured approach can also lead to more comprehensive insights into how CE functions across different settings.

By focusing on a state-owned enterprise operating in Ethiopia, this dissertation contributes a nuanced, context-sensitive perspective that recognizes the influence of state ownership on CE processes. The dissertation advances knowledge of the different contextual dimensions of CE, extending our understanding on how CE initiatives are implemented in state-owned enterprises. Furthermore, the dissertation advances the understanding of how HRM practices serve as a critical enabler of CE in the public sector. It highlights the ways

in which strategically aligned HRM practices can support innovation and CE activities within state-owned settings. This expands the HRM-CE nexus by showing how HRM practices can foster an entrepreneurial culture in a state-controlled environment.

#### *Practical contributions*

The findings of this dissertation provide valuable insights for managers, practitioners, and policy makers in organizations looking to improve entrepreneurial activities. The dissertation offers valuable perspective for managers in state owned enterprises seeking to improve entrepreneurial activities within corporate environments. By understanding the contextual factors that affect CE, managers can better design and implement initiatives that improve innovation and growth within their firms. The dissertation identifies the strategic importance of HRM practices that align with and support CE to foster a culture of innovation within the public sector organizations. This dissertation also offers insights to managers in state-owned enterprises to consider CE as a main strategic imperative to bring employees together and take part in entrepreneurial initiatives. They should provide training, rewards, and support to engaged employees in creativity and innovations.

Organizations can leverage the findings of this dissertation to develop more context-sensitive CE strategies. By understanding the heterogeneity of contexts, firms can better align their entrepreneurial initiatives with local needs and conditions, ultimately enhancing their performance and sustainability. This dissertation also provides useful insights for HR managers to improve HRM policies and procedures to promote a working environment conducive to creativity and innovation. More importantly, HR managers should create a conducive environment where organizations can pursue CE activities by providing training and development to employees. This should also be strengthened with adequate reward policies intended to motivate employees for better entrepreneurial outcomes.

This dissertation highlights that policymakers play a crucial role in shaping the conditions under which CE can succeed in state-owned enterprises. Government support, regulatory flexibility, and financial incentives for innovation are critical for enabling state-owned enterprises to pursue and nurture CE. Policymakers can use the insights from this dissertation to create supportive environments for CE. By recognizing the contextual factors that influence entrepreneurial activities, policies can be designed to improve innovation and entrepreneurship, particularly in developing countries where such initiatives can drive economic growth and social development.

#### **5.4 Limitations and Future Research Directions**

The study is subject to limitations that give rise to opportunities for future research. The empirical papers (see chapter 3&4) of the dissertation applies single case study from one state-owned enterprises in Ethiopia to seek explanations on how CE unfolds. The dissertation zoomed in on selected departments to seek deep investigations into how CE unfolds through innovation outcomes in R&D and explores the role of HRM practices. However, it may limit the analytical generalizability of the findings to other state-owned enterprises in developing countries of different sectors, countries, or regions. The findings of this dissertation could therefore be further validated and extended through extensive research design that incorporates a larger sample size across various industries and countries. Comparative studies between state-owned enterprises and private enterprises could also provide deeper insights into the distinct drivers and barriers of CE in state-controlled organizations. Additionally, longitudinal research tracking CE activities over time would offer valuable perspectives on the sustainability of entrepreneurial initiatives in state-owned enterprises.

Moreover, the dissertation does not include samples from external stakeholders such as government bodies, industry regulators, and private sector partners regarding CE activities taking place in state-owned enterprises. These were not considered in the analysis due to the scope of the study, but future research could extend and integrate the findings by incorporating other external stakeholders responsible in such state enterprises. This broader stakeholder view could demonstrate how external pressures and collaborations influence CE initiatives.

Furthermore, while this dissertation offers important insights into how HRM practices can be used to foster entrepreneurial behavior, it does not consider how it interacts with other organizational functions. Therefore, future research could extend this finding by incorporating the interaction of HRM practices with other organizational functions to facilitate the implementation of CE in state-owned enterprises.

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## APPENDICES

### Appendix 1: Sample of a semi-structured interview guide 1.

1. Introductory session
  - Introducing the researcher and the objective of the research
  - Introducing the nature of the interview
  - Statement of permission to record an interview and confidentiality. *“As a standard procedure in research, I want to record our interview so that I can keep track and analyze it systematically. The recording is not shared with anyone outside the research team (me and my supervisors).”*
2. Background information
  - Educational background
  - Experience
  - Position in the company
3. General questions
  - 3.1. What would you perceive to be entrepreneurial behavior as an employee in an established organization?
  - 3.2. Tell me about your work related to entrepreneurial activities in your organization.
  - 3.3. Can you tell me the story of how things related to entrepreneurial activities are going?
  - 3.4. Tell me about the most recent examples related to entrepreneurial activities in the organization.
  - 3.5. Can you tell me how ideas are generated? (who, where, how...) And how does the organization make use of the idea for entrepreneurial activities?
  - 3.6. How does the organization turn the idea into innovation (.....the process: who, where, what, how...)?
  - 3.7. What do you consider being the ideas that generated the most important innovations coming from your department/section? (would you tell me a concrete example(s)?)
  - 3.8. What has been the process of that innovation from idea generation to introduction into the market? And who is involved in the innovation?
  - 3.9. How does your organization *support* CE?
    - ✓ In terms of encouraging innovative ideas
    - ✓ Providing necessary resources or expertise
    - ✓ Institutionalizing the entrepreneurial activity within the firm’s system and processes
  - 3.10. What is the attitude towards CE?
  - 3.11. Is there a way for employees to put forward entrepreneurial ideas? I.e., who should you turn to if you have ideas? Will that be welcomed and acted upon?
  - 3.12. How are entrepreneurial opportunities identified, evaluated, and selected by your organization? By whom?
  - 3.13. What is the attitude to innovation in the organization?
  - 3.14. How is the structure for new corporate venturing in relation to the old organizational structure?
  - 3.15. What are the forces that make your organization engaged in different CE activities?

- 3.16. Are there external circumstances that provide opportunities for your organization to innovate? Which ones?
- 3.17. How competitive is the environment in relation to offering new entrepreneurial activities?
- 3.18. What opportunities are there to increase your organization's business?
  - ✓ In terms of geographical expansion
  - ✓ Product improvement
  - ✓ Process improvement
- 3.19. Could you tell me if you are aware of any government policies and support for entrepreneurial activities in your organization?
- 3.20. Have there been any technological developments in the market that your organization did benefit from? If so, please explain.
- 3.21. Do you scan the environment for opportunities in any way? If so, how? Does anyone else in the organization? Do you have any examples?
- 3.22. How is your organization structure supporting CE?
- 3.23. How is the policy and design of your organization in promoting CE?
- 3.24. How are your organization's policy and design promoting open communication, participation, and collaboration in creating entrepreneurial orientation?
- 3.25. What is the role of the HR department in supporting innovations and entrepreneurial activities in the organization?
- 3.26. What do you think that the major challenges faced in the future related to CE activities of your organization? And what factors that will facilitate or impede your ability to deal with these challenges?
- 3.27. Are there any areas left that you want to say in relation to CE activities?

## **Appendix 2:** Sample of a semi-structured interview guide 2.

### 1. Introductory session

- Introducing the researcher and the objective of the research
- Introducing the nature of the interview
- Statement of permission to record an interview and confidentiality. *“As a standard procedure in research, I want to record our interview so that I can keep track and analyze it systematically. The recording is not shared with anyone outside the research team (me and my supervisors).”*

### 2. Background information

- Educational background
- Experience
- Position in the company

### 3. General questions

3.1 Tell me about how the HRM practice entertains CE?

3.2 What is your organization’s role in supporting CE activities?

3.3 What is your role in supporting the entrepreneurial activities of your organization?

3.4 How are you trying to influence/change the entrepreneurial activities of the organization?

3.5 How does HRM practice promote the working environment for CE in your organization?

3.6 How the HRM practices and conditions can enhance the capabilities, creativity, and talent of individuals (employees) in existing organizations to pursue CE activities?

3.7 How often does the recruitment process of employees consider the entrepreneurial activities of the organization?

3.8 When recruiting for top management positions have you pay attention to entrepreneurial characteristics (creativity, drive for action, autonomy, innovation etc)

- Do you have concrete examples of this?

3.9 How do the training and development practice of your organization support corporate entrepreneurial initiatives?

3.10 How does the training and development program support employees to engage in CE activities?

3.11 To what extent training is focused on creativity, and enforcement of ideas/innovations?

- 3.12 How is the human capital of your organization in fostering CE activities?
- 3.13 How do the HR policies and procedures support corporate entrepreneurial initiatives?
- Can you provide some concrete examples of this?
  - To what extent the policies and procedures can provide open communication, and collaboration, and promote entrepreneurial initiatives?
- 3.14 How is the reward system of the organization enhancing the creativity, and innovative ideas of employees?
- 3.15 How the earnings of the management are linked to the results that were achieved through initiatives?
- 3.16 Is the creativity and ability of management to take entrepreneurial risks consider when they are appraised and paid?
- 3.17 Do you have any other issue that you are believed to be raised in relation to HRM practice for CE in the organization?