



# Unveiling the Nexus of Corporate Entrepreneurship, Strategic Agility, and Organizational Performance in Jordan's ICT Sector

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## ABSTRACT

Corporate entrepreneurship drives organizations to excel in existing markets by fostering strategic orientations that seek both advantages and opportunities. This study investigates the relationship between corporate entrepreneurship and organizational performance, mediated by strategic agility. Through a quantitative approach and structural equation modeling, data from 300 individuals in the Information Communications and Technology (ICT) firms of Jordan were analyzed. Results indicate a positive correlation between corporate entrepreneurship and organizational performance, with strategic agility playing a mediating role. Jordan's ICT sector exhibits a tendency to leverage corporate entrepreneurship and strategic agility, enhancing organizational performance. This research expands resource-based view theory in new dynamic setting and new country type, it also provides an answer for the inconsistency found in the literature when it comes to the relationship between corporate entrepreneurship and strategic agility and provides solutions for dynamic organizations that are under the urge to enhance their performance.

**Keywords:** Resource-Based View Theory, Organizational Performance, Strategic Agility, Corporate Entrepreneurship

**JEL Classifications:** L26, M10, M13, O32

## 1. INTRODUCTION

Market dynamics have thrust businesses into an environment of heightened uncertainty (Back and Bausch, 2019). Various powerful influences have imposed substantial pressure on firms, compelling them to elevate their intelligence and proactivity (Atiq and Karatas-Ozkan, 2013). Organizations are obligated to showcase agility in identifying emerging opportunities within evolving markets (Coccia, 2016). The effort by firms to scrutinize their characteristics has been widespread (Kazlauskaite et al., 2011). The utilization of strategic entrepreneurship is gaining popularity as a firm-level approach to enhance innovative capabilities and secure a competitive edge (Acs et al., 2009). The significance of adopting corporate entrepreneurship (CE) is notable due to the introduction of various novel and complex practical and theoretical challenges (Acs et al., 2013). Theoretical considerations emphasize the ongoing need for

businesses to evaluate outcomes that impact, elucidate, and shape the conditions conducive to the flourishing of strategic entrepreneurship.

Conversely, from a practical standpoint, companies need to discern essential principles guiding their capabilities towards developing valuable entrepreneurial strategies (Kim, 2018). Strategic entrepreneurship is characterized as an emerging concept within the entrepreneurship domain, representing a blend of entrepreneurship and strategic management (Boudreaux, 2020). According to Boukamcha (2019), strategic management and entrepreneurship are dynamic skills that are closely related to the effectiveness of businesses, emphasizing the challenge businesses face in attaining and maintaining a competitive market position. The incorporation of CE assists firms in navigating rapid environmental changes, protecting against potential threats, and influencing their growth and character (Sharma, 2019; Santos

et al., 2019). It is evident that successful firms commonly adopt CE as a practice, revitalizing them to be more risk-taking, innovative, and assertive in enhancing their competitiveness and overall performance.

Contemporary organizations face strategic challenges due to the intricate and unpredictable nature of the business environment (Kozlov, 2018). Businesses are increasingly adopting the practical application of CE to enhance their existing and future core competencies (Klein et al., 2013). This emphasizes the crucial role of corporate entrepreneurs in actively contributing to the development and implementation of various strategic entrepreneurship scenarios (Puranam et al., 2014). Prevailing research widely agrees that effective CE positively influences business performance (Sánchez-Gutiérrez et al., 2019; Tipu and Fantazy, 2018). Roundy and Bayer (2019) note a growing acknowledgment that CE contributes to enhanced company performance. Recognizing CE as a legitimate and advantageous practice extends beyond the organizational borders (Kyrgidou and Hughes, 2010). Salas et al. (2010) highlight the significance of CE as a growth strategy, especially in the context of launching startups and new corporate ventures. The central focus of this field revolves around diverse corporate startups and their alignment with the overarching corporate strategy.

The creation of a beneficial internal organizational environment is a benefit of successful strategic entrepreneurship, especially in the context of corporate entrepreneurship (CE) directed by corporate entrepreneurs (Olander et al., 2016). As highlighted by Mazzei et al. (2017), fostering creative and entrepreneurial initiatives is crucial for the success of any company, irrespective of its size. As mentioned by Albhirat (2023), organizations aim to leverage product-market opportunities through the adoption of creative and proactive approaches. Hence, establishing an internal environment that encourages a company's eagerness and commitment to identifying opportunities, as well as the innovations arising from such identification, can significantly improve organizational performance in current volatile markets (Shirokova et al., 2013).

The present research addresses various theoretical gaps present in the literature on entrepreneurship. An examination of the current literature reveals a persistent void in our comprehension of the outcomes associated with CE. Thus far, there is less literature explicitly exploring into the association between specific components of CE, namely competitive aggressiveness, risk-taking, and innovation, and their impact on organizational performance. Clearly defining distinct components of strategic entrepreneurship could propel advancements in the field, empowering researchers to examine the associations and impacts of each component on organizational performance. Consequently, there is a pressing need to foster the development of theories that advocate strategies guiding the organizational innovative behaviors.

Additionally, current theoretical insights propose that Strategic Agility (SA) acts as a configurative mechanism, suggesting its role as a mediator that links CE to organizational performance. However, the mediating function of SA in investigating the

association between CE and organizational performance lacks adequate empirical validation. Consequently, the inclusion of SA as a mediating factor in this study aims to elucidate the causal mechanism underpinning the correlation between CE and organizational performance. To address this gap in the current literature, a comprehensive examination is necessary to impartially assess the mediating role of SA in the link between CE and organizational success. A deeper comprehension of SA's mediating function in the relationship between CE and organizational success could guide entrepreneurship literature in formulating a practical model for implementing strategic entrepreneurship.

A definitive framework or a comprehensive theory for CE is lacking in the existing literature. To address this gap, this study takes the initial step of constructing an integrated theoretical framework for CE by adopting the Resource-Based View (RBV) theory. To unravel the intricacies of corporate entrepreneurship relationships, this involves clarifying the constituent elements and empirically scrutinizing relevant scenarios. Following Barney's (2001) perspective, the RBV theory underscores the importance of resources in elucidating performance variations among enterprises. CE emerges as a pivotal intangible asset fostering entrepreneurial practices within organizations. The possible effect of capabilities on firm performance motivates this research to employ the RBV in exploring the relationships between CE and organizational performance. The relevance of the RBV of the firm is critical, especially since variables like CE and SA find theoretical foundations in the RBV. As the understanding of the functions of CE remains somewhat limited, there is a necessity to carve a new path by elucidating the role of SA in each stage of CE and its subsequent impact on organizational performance. Consequently, there exists a theoretical void and a shortage of research in the prior literature. Therefore, this study endeavors to bridge these gaps and offer fresh insights into the subject.

Therefore, this research makes a distinctive contribution to entrepreneurship literature by applying the RBV and delving into the connections between organizational capabilities, specifically entrepreneurship, and its performance. Conversely, on a practical front, there is a pressing need for more diversity in both industrial and geographic scopes within CE research. Most of prevailing studies have relied on data gathered in the developed economies, predominantly from the Europe and United States. In contrast, this research scrutinizes the robustness of these findings using data sourced from Information Communications and Technology (ICT) companies in Jordan. The Jordanian ICT sector necessitates CE roadmaps to fortify strategic postures, transform opportunities into new business models, and innovate new services and products. Consequently, SA emerges as a vital tool for firms to secure a competitive edge and maintain elevated performance levels. In summary, the present research leverages the RBV to explore how firms, working in a problematic landscape, employ strategic entrepreneurship to attain superior organizational performance.

The subsequent sections of this document are organized as follows: In Section Two, the theoretical foundation is presented, offering a synopsis of prior literature that highlights the significance of CE and SA in improving performance. Section Three provides an in-

depth exploration of the study's materials and methodology, while Section Four covers data analysis and results. The final sections provide detailed discussion and conclude the paper, offering reflections on the study's limitations and suggesting potential avenues for future research.

## 2. LITERATURE REVIEW

### 2.1. Theoretical Background

This research leverages the RBV of the firm, as articulated by Barney (1991) and Grant (1991), to explore the connections between CE and SA with OP. As elucidated by Alvarez and Barney (2017), the RBV emphasizes the role of capabilities and resources in elucidating consistent performance distinctions among organizations. In this context, resources encompass both intangible and tangible assets within an organization, as posited by Barney and Arikan (2005), while capabilities denote the collective ability of a set of resources to execute specific tasks or activities, as defined by Grant (1991). Effectively managing these resources is crucial for organizations to actively engage in CE, as highlighted by Ireland et al. (2003). This involves bundling resources to cultivate capabilities such as risk-taking, innovativeness, and proactiveness—integral components of CE.

The RBV defines resources as assets unique to a firm and challenging for competitors to replicate. The RBV argues that a firm's capacity to access crucial resources plays a pivotal role in attaining a heightened competitive advantage (Brous et al., 2019). Consequently, organizational capability emerges as a key factor, embodying intricate combinations of extensive knowledge, assets, and individual skills that empower firms to accomplish activities and leverage their resources effectively (Teece et al., 2012). In a broader context, these essential capabilities are indispensable for any organization to realize its organizational objectives. Thus, as the external environment evolves, firms must consistently enhance their resource base to uphold competitive advantage and excel in the market. Specifically, the dynamic abilities of organizations, involving the adept combination, development, and reorganization of both external and internal competencies to adapt to external changes, become crucial for achieving superior performance levels (Helfat et al., 2009).

The significant effect of resources on performance motivates the present study to adopt the RBV as a framework for scrutinizing the relationships between CE and SA with OP. This choice aligns with Barney's (2012) recommendation to consider RBV within the context of strategic management. The relevance of RBV to the firm is highlighted by the theoretical underpinnings of research framework. Previous research has applied RBV in investigating CE (Albhirat et al., 2023) and SA (Ziyae et al., 2022). In extending the ongoing discourse, the current study delves into the connections between CE and SA with OP.

### 2.2. Corporate Entrepreneurship

CE posits that organizations exhibit an inherently entrepreneurial approach to strategy formulation, emphasizing their proactive pursuit of new opportunities to achieve substantial growth (Kraus et al., 2014). Originating from the strategic management literature,

CE is conceptualized as a firm-level phenomenon (Acs et al., 2016). In accordance with the RBV, CE is considered a vital metric and a fundamental process for leveraging resources to achieve competitiveness (Brous et al., 2019). According to Wiklund and Shepherd (2005), this involves establishing new products, processes, administrative innovations, and modes of thinking to facilitate organizations in rejuvenating and redefining both their structure and associated markets. Felix et al. (2019) observe that CE can take on formal or informal forms, giving rise to new ventures within established companies through innovations in products and processes. CE plays a pivotal role in organizational advancement, serving as a tool for revenue growth, profitability improvement, and overall company development (Davidsson, 2015). The impetus for engaging in CE arises from various factors, including the desire to enhance profitability through organizational efficiency, the necessity to adapt to significant changes in the marketplace, and the recognition of limitations associated with conventional corporate management practices (Escriba-Carda et al., 2020). As highlighted by Gallouj (2017), organizations can be categorized as either entrepreneurial or conservative based on their willingness to take risks and their level of interest in innovation.

As per Harms et al. (2012), firms consistently embracing bold innovations and willingly undertaking substantial risks in their product-market strategies are displaying entrepreneurial traits. In the context of this study, CE is defined as the strategic orientation of a company, encompassing a series of commitments and actions reflecting entrepreneurial behavior across the entire organization (Wiklund and Shepherd, 2005). Thus, the concept of Strategic Entrepreneurship aligns with strategic management principles and emphasizes a firm's entrepreneurial endeavors in terms of innovativeness, risk-taking, and proactivity (Hitt et al., 2001). These characteristics are elucidated by Lumpkin and Dess (2001), who characterize innovativeness as a readiness to foster experimentation and creativity in introducing new products, emphasizing innovations, and developing new processes. Risk-taking involves a propensity for significant risks, such as entering unfamiliar markets, allocating substantial resources to ventures with uncertain outcomes, and taking on substantial debt. Proactiveness implies adopting a forward-thinking, opportunity-seeking mindset, which includes introducing new products or services ahead of competitors and taking proactive steps to anticipate future demand, thereby instigating change and shaping the business environment.

### 2.3. Strategic Agility

In recent times, dynamics of continuously changing business and market landscape have gained unprecedented significance. Internal shifts within organizational environments, such as the escalating influence of the Internet in the business realm, the advent of the Internet of Things, the rapid emergence of Industry 4.0, ongoing technological advancements, evolving customer preferences, the swiftness of information dissemination, and the intricate management of employees, compel businesses to undergo transformations. These factors have imposed unprecedented challenges on businesses, demanding rapid adaptation and responsiveness to alterations in their work environments (Nejatian et al., 2019). Amidst intricate management challenges



like globalization, dynamic environments, swift innovation, and mergers and acquisitions, the importance of SA is universally acknowledged. Reevaluating both the core principles of strategic decision-making processes and how different methods and strategies are used across different industries to deal with increased environmental uncertainty has become necessary (Vecchiato, 2015). In the early 20<sup>th</sup> century, the concept of agility originated from a study conducted by the Iacocca Institute, funded by the US government in 1991. Subsequently, various studies have introduced different definitions of agility. Goldman and Nagel (1993), for instance, define agility as the ability to adapt to changing customer expectations within an impulsive competitive market, ultimately aiming to improve profitability.

Moreover, as per Gunasekaran (1999), agility is characterized as the ability not only to endure but also to thrive in a competitive environment by swiftly and effectively adapting to market changes through the creation of specifically designed goods and services. On the other hand, SA focuses on the capacity for unconventional thinking and behavior, fostering innovations in new business models (Doz and Kosonen, 2010). Broadly defined, SA, according to Nejatian et al. (2019), encompasses the essential capabilities that empower firms to navigate fluctuating environments by consistently detecting, perceiving, and adapting through organizational modifications and strategic actions. Agility is a contemporary concept in business research, with varied interpretations across different research fields. Research on agility can be broadly categorized into two types. The first group, as outlined by Braunscheidel and Suresh (2009), perceives agility as a general competency enabling businesses to swiftly adjust their operations to quickly changing conditions and rapid shifts in customer needs. On the other hand, the second group, described by Dyer and Shafer (1998), views agility as an integrated approach, paradigm, system, or management practice that is based on many talents rather than just a competency. Consequently, an agile company should exhibit flexibility in its operations and possess the capability to reorganize its strategy in a manner that is responsive to environmental shifts.

## 2.4. Organizational Performance

Organizational performance (OP) serves as the foundation for evaluating progress towards predetermined objectives, allowing an organization to pinpoint both its strengths and weaknesses and modernize future initiatives accordingly (Fantazy et al., 2010). In assessing OP, the literature employs a range of measures encompassing both financial and non-financial aspects (Hoque and James, 2000). It is more suitable to support a well-rounded approach, as recommended by Maskell (1991), which calls on organisations to use a combination of non-financial and financial methods. This comprehensive approach is deemed essential for effective competition in today's business environment, as relying solely on traditional OP measures is deemed inadequate (Agami et al., 2012). Financial dimensions include market returns, growth, and accounting returns (Combs et al., 2006), while non-financial measures encompass customer satisfaction, gauged in terms of the perceived value customers attribute to the product (Fantazy et al., 2010).

## 2.5. Hypothesis Development

### 2.5.1. *The relationship between corporate entrepreneurship and strategic agility*

Vaillant and Lafuente (2019) contended that an organization's capacity to engage in entrepreneurial activities directly influences SA. They emphasized that SA facilitates the integration of turbulent environments, enabling effective responses to changes and the pursuit of opportunities. Building on this perspective, Hagen et al. (2019) expanded the view by asserting that SA not only aids organizations in seizing new opportunities but also serves as a dynamic meta-capability, helping them navigate and manage the risks and uncertainties associated with entrepreneurial activities. Kohtamäki et al. (2020) further supported this notion, stating that Corporate Entrepreneurship relies on SA as an enabler to identify customer needs and innovate appropriate solutions, consequently enhancing OP. In a related vein, Xing et al. (2020) argued that the entrepreneurial orientation of teams can bolster SA dimensions, sparking scholarly interest in examining the impact of SA on the association between CE and OP. Therefore, this study posits the following hypothesis:

H<sub>1</sub>: Corporate entrepreneurship has a positive effect on strategic agility.

### 2.5.2. *The relationship between strategic agility and organizational performance*

Roth (1996) pioneered the exploration of the relationship between SA and non-financial performance in organizations, revealing a positive impact on process performance. This groundbreaking study paved the way for subsequent research looking into the direct influence of SA on non-financial performance aspects (Govender, 2020). For instance, Weill et al. (2002) investigated the impact of SA on IT infrastructure performance, discovering that enterprises with a higher level of SA tend to offer a greater array of services. Similarly, Sambamurthy et al. (2003) argued that SA contributes to more competitive actions in IT companies. This sentiment was echoed by Fourné et al. (2014), who examined the impact on Multinational Enterprises (MNEs) and identified a positive influence on competitive performance. In a similar vein, Yildiz and Aykanat (2021) established a positive relationship between SA and Organizational Performance (OP) within industrial companies in Turkey. Other studies have explored the impact of SA on knowledge transfer performance (Junni et al., 2015), absorptive capacity (Kohtamäki et al., 2020), and team performance (Xing et al., 2020).

A limited number of scholars have looked into the influence of SA on both the financial and non-financial aspects of organizational performance. Doz and Kosonen (2010) underscored that SA is primarily crucial for the capability to reshape and revitalize business models. Additionally, Oyedijo (2012) investigated the impact of SA on the performance of the Nigerian telecom industry, finding that SA is a predictor of Organizational Performance (OP) success. Furthermore, Shin et al. (2015) asserted that the presence of SA leads to improved customer retention and financial performance. Moreover, Vaillant and Lafuente (2019) stated that SA enhances organizations' ability to expand their market and improve financial performance. In a recent study, Al-Taweel and Al-Hawary (2021) focused on stock exchange

companies and explored the impact of SA on OP, discovering a positive relationship. Consequently, this study posits the following hypothesis:

H<sub>2</sub>: Strategic agility has a positive effect on organizational performance.

### 2.5.3. The relationship between corporate entrepreneurship and organizational performance

Klein et al. (2013) have proposed that the existence of CE prompts firms to engage in strategic entrepreneurial actions for gaining a competitive advantage. Similarly, according to Cristo-Andrade and Ferreira (2020), CE is a set of procedures and systems intended to help businesses realise entrepreneurial goals, establish a competitive edge, and improve performance. Optimal firm performance is realized when CE integrates behaviors that seek opportunities with activities that seek advantages (Zhao et al., 2020). Kyrgidou and Hughes (2010) emphasized the crucial role of continuous innovation in the entrepreneurial process, acting as a balancing factor between discovering and exploiting opportunities. According to Werthes et al. (2018), organizations generate wealth by integrating advantage-seeking and effective opportunity recognition behaviors. Recent studies in entrepreneurship often treat the components of Corporate Entrepreneurship (CE) as a unified construct, examining their collective impact on business success, as highlighted by Niskanen et al. (2017). Consequently, this study posits the following hypothesis:

H<sub>3</sub>: Corporate entrepreneurship has a positive effect on organizational performance.

### 2.5.4. Mediating Role of Strategic Agility in the relationship between corporate entrepreneurship and organizational performance

Building upon previous research, particularly the work by Govender (2020), which initially sought to establish a direct relationship between CE and OP with SA as a moderator, this study reconsiders the role of SA as a mediating factor. Govender's findings revealed direct relationships between CE and OP, CE and SA, and SA and OP, aligning with the contemporary literature (Xing et al., 2020). However, Govender's study did not identify a moderation effect for SA. Recognizing that SA is considered an organizational ability that may be present or absent (Eisenhardt and Martin, 2000) and is contingent (Fourné et al., 2014), this study challenges the assumption of SA as a moderator. Moreover, acknowledging the lack of consensus on the impact of CE on OP (Williams Jr et al., 2018), this study posits that mediating and moderating factors contribute to the conflicting results in existing literature.

Drawing inspiration from Lumpkin and Dess (1996), who suggested exploring moderating, mediating, independent, and interaction effects in the Entrepreneurial Orientation (EO)-performance relationship, this study reframes SA as a mediating factor between CE and OP. Furthermore, Govender's call for scholars to extend the study settings beyond South Africa and explore the impact of organizational size, along with Al-Taweel and Al-Hawary's (2021) recommendation to examine SA in turbulent industries, guides the focus of this study. Considering the dynamic nature of the Jordanian ICT sector and the evolving

environmental conditions, this research aims to investigate the mediating impact of SA on the relationship between CE and OP. Hence, this study posits the following hypothesis:

H<sub>4</sub>: Strategic agility mediates the impact of corporate entrepreneurship on organizational performance.

## 3. RESEARCH METHODOLOGY

### 3.1. Conceptual Framework

Figure 1 illustrates a conceptual model that explains and explores various factors influencing the enhancement of OP. This framework encompasses an outcome variable, OP, manifested through multiple distinct performance items. The corporate entrepreneurship is depicted as main independent variable of the study. Furthermore, the research model introduces SA as a potential mediator in the relation between CE and OP. The proposed associations within this study are explicated in Figure 1. The direct arrows from CE to SA and SA to OP indicate hypothesized direct relationships. Similarly, arrows from CE to OP through SA depict proposed associations concerning the mediating role of SA in the influence of CE practices on OP in the ICT sector.

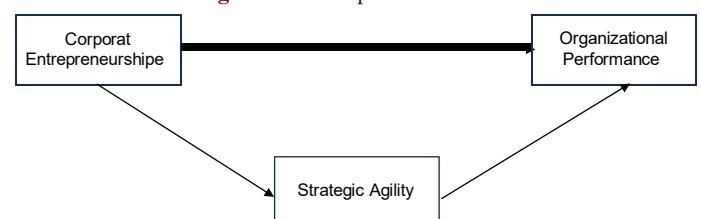
### 3.2. Measuring Instrument

The primary objective of this study is to assess the influence of CE on OP within Jordanian ICT companies. All measurement indicators for the constructs were developed by adapting methods from previous studies. Notably, the constructs in the model are reflective and employ multiple-item scales, as opposed to formative. Details of the measurement indicators for all constructs can be found in the Appendix. The construct of CE is gauged through ten indicators, adapted from the work of Hughes and Morgan (2007). Similarly, the construct of SA incorporates a total of nine indicators, which were adapted from Hock et al. (2016). For measuring OP in ICT firms, sixteen items were adapted from Kaplan and Norton (1992).

### 3.3. Data and Sample Selection

A sufficiently large sample size can ensure that the collected data are reliable for making recommendations, drawing inferences, and reducing bias (Bryman, 2016). According to Roscoe (1975), an appropriate sample size should fall between <30 or larger than 500, with 10% of the main population. Similarly, Sekaran and Bougie (2016) assert that the sample size must be between 30 and 500. On the other hand, the sample size needs to be relative to the population size (Bryman, 2016). Moreover, the sample size can be determined by Krejcie and Morgan (1970), which is usually used for behavioral and social research (Faul et al., 2009). According to the sample size table of Krejcie and Morgan (1970), the sample size for this research population (1200) at a confidence level of

Figure 1: Conceptual framework



95% and a marginal error of 5% is 291. Therefore, the minimum representative sample for this study is 291. In contrast, to enhance the authenticity and precision of the results, Creswell (2009) suggests maximizing the number of respondents. This rationale influenced the choice to set the sample size for this research at 360 participants.

The data collection process was conducted between February and April 2023. Prior to its administration, the survey instrument underwent evaluation by ten ICT managers from eight distinct ICT companies to identify any issues related to phrasing, content, or ambiguity in the questions. Consequently, a few small adjustments were implemented based on their feedback. The survey data were collected directly through the distribution of Google Forms. All selected ICT organizations willingly participated in the study, spanning various geographic locations. Out of the 360 surveys distributed, 300 completed responses were received, resulting in an 83.3% response rate. Scholars hold varying perspectives on response rates. For instance, some researchers argued that a response rate of at least 20% is essential for the data to be deemed suitable for further analysis (Malhotra and Grover, 1998), while Mellahi and Harris (2016) maintained that there is no minimal response rate that is generally agreed upon. Goudy (1978) proposed, from a similar angle, that a response rate need to range from 30% to 70%. Nevertheless, with 300 received responses surpassing the minimum threshold of 291, the quantity was deemed adequate for PLS-SEM analysis.

### 3.4. Statistical Analysis

The Partial Least Squares Structural Equation Model (PLS-SEM), a non-parametric, multivariate technique for estimating path models with latent variables, was selected for several reasons (Hair et al., 2017; Avkiran, 2018). Firstly, the exploratory nature of this research, aiming to investigate the interrelationship between CE, SA, and performance in the ICT sector—a topic less explored in existing literature. Secondly, PLS-SEM excels at handling complex frameworks and is particularly recommended for mediating models, making it suitable for this study, which introduces SA as a mediator incrementally (Cepeda et al., 2018).

The analysis using PLS-SEM involves a two-step process, commencing with the evaluation of the measurement model. This includes an assessment of reliability, convergent validity (CV), and discriminant validity (DV) (Chin, 1998). Subsequently, the study analyzed the structural model to investigate the proposed relationships (Hair et al., 2017), aligning with the incremental nature of the research, particularly the examination of SA as a mediator. Hence, PLS-SEM is chosen due to its suitability for the research objective, which involves the exploration of a complex model. Within the SEM framework, this research incorporated both measurement and structural models to address specific research goals (Sarstedt et al., 2023).

Sarstedt et al. (2023) proposed that assuming normality is unnecessary when utilizing PLS, and Chin et al. (2003) affirmed that non-normal distribution is not uncommon in survey research. Notably, the use of SmartPLS for investigating performance-related studies is becoming increasingly prevalent. Three main

benefits of using PLS-SEM were described by Sarstedt et al. (2023): firstly, it permits the use of moderate sample sizes; secondly, it makes models with normatively expressed constructs easier to evaluate; and lastly, it outperforms regression analysis when determining the moderating effects of variables.

Furthermore, as emphasized by Sarstedt et al. (2023), the PLS-SEM approach works well for a complex model where sample size constraints are less stringent, and emphasis is placed on prediction over parameter estimation. Given that the data for this study originated from a single source, PLS-SEM was a suitable choice. Thus, to achieve its research objectives, this research estimated both the measurement and structural models using the PLS-SEM approach. The structural model tests the proposed study hypotheses, while the measurement model assesses the validity and reliability of the constructs.

## 4. RESULTS

### 4.1. Demographic Profile of the Respondents

The demographic results reveal that individuals surveyed possess the necessary qualifications and employment status to be included in this research. Among the respondents from the ICT companies under investigation, Table 1 results reveal that a majority were male (66.3%), while females comprised 33.7%. In terms of age distribution, most participants were aged over 45 years (31.9%), followed by those in the 40-49 age group (25.3%), 50 and above (34.7%), and <30 years (8.7%). Regarding educational attainment, the majority held first-degree qualifications (49.3%), 18.7% had master's/postgraduate degrees, and 31.0% held diplomas, with the remaining 1.0% holding Ph.D. degrees. The results further indicate that the majority of participants (39.0%) had between 5 and 10 years of experience working for Jordanian ICT companies, 32.0% had worked for 11-15 years, 19.3% for more than 15 years, and 9.7% for <5 years.

### 4.2. Common Method Bias

During the initial stage, this research utilized the extensive collinearity assessment technique recommended by Kock

**Table 1: Demographic data of respondents**

Demographic	Frequencies	Percentage
Gender		
Male	199	66.3
Female	101	33.7
Age		
<30	26	8.7
30-39	103	34.3
40-49	104	34.7
50 and above	67	22.3
Academic qualification		
Diploma	93	31.0
Bachelor Degree	148	49.3
Master Degree	56	18.7
PhD Degree	3	1.0
Work experience		
<5 years	29	9.7
5-10	117	39.0
11-15	96	32.0
More than 15 years	58	19.3

et al. (2021) to examine the problem of common method bias. It commonly emerges in SEM-related research due to the measuring techniques employed, wherein instruments might impact responses, resulting in shared variation among the items. To mitigate this issue, a random variable was generated, and a thorough collinearity assessment was performed by regressing this random variable on the variables under investigation. The findings, presented in Table 2, indicate that all Variance Inflation Factors (VIFs) for collinearity are below the significance threshold of 3.3 (Hair et al., 2019). Consequently, this demonstrates that common method bias is not a concern in this study.

### 4.3. Measurement Model

In this study, the proposed model underwent examination using the two-step approach advocated by Anderson and Gerbing (1988). In the initial phase, the measurement model underwent assessment to ascertain its reliability and validity, following the guidelines established by Hair et al. (2019). In order to evaluate the measurement model, loadings, Average Variance Extracted (AVE), and Composite Reliability (CR) were calculated using

predetermined criteria: loading values had to be at least 0.5, AVE had to be  $>0.5$ , and CR had to be  $>0.7$ . The results of the measurement model test are provided in Table 3, indicating generally acceptable loading values, with only one or two loadings slightly below 0.708 (Hair et al., 2019). All of the CR values and AVEs were more than 0.7 and 0.5 respectively. Three first-order constructions made up the model: CE, SA, and OP. Table 3 elaborates the validity and reliability tests for these first-order constructs, therefore verifying their validity and reliability.

Subsequently, based on Henseler et al. (2015), discriminant validity was assessed using the Heterotrait-Monotrait Ratio of Correlations (HTMT) criterion. Two criteria were considered: the stricter one proposed a value of at least 0.85, while the more lenient one suggested a value of  $\leq 0.9$ . The HTMT values are displayed in Table 4, and Each value falls below the lenient threshold of  $\leq 0.9$ . Hence, it is logical to infer that participants, in general, could distinguish between the constructs under investigation. Overall, the measurement results demonstrate that the constructs exhibited validity and reliability.

### 4.4. Structural Model

The findings of the direct relationships are presented in Table 5, which includes the coefficient values and corresponding parameters relating to their significance. To examine the research hypotheses,

**Table 2: Full collinearity testing**

Construct	CE	SA	OP
VIF	1.005	1.798	1.791

**Table 3: Measurement model results**

Constructs	Items	Indicator reliability	Internal consistency		Convergent validity
		Outer Loadings $>0.5$	Cronbach alpha $>0.7$	Composite reliability $>0.6$	AVE $>0.5$
CE	1	0.678	0.881	0.903	0.511
	2	0.670			
	3	0.804			
	4	0.693			
	5	0.671			
	6	0.703			
	7	0.685			
	8	0.771			
	9	0.743			
SA	1	0.906	0.971	0.975	0.813
	2	0.910			
	3	0.912			
	4	0.914			
	5	0.902			
	6	0.889			
	7	0.878			
	8	0.904			
	9	0.898			
OP	1	0.881	0.977	0.979	0.743
	2	0.887			
	3	0.877			
	4	0.868			
	5	0.903			
	6	0.883			
	7	0.860			
	8	0.872			
	9	0.876			
	10	0.873			
	11	0.859			
	12	0.829			
	13	0.837			
	14	0.811			
	15	0.826			
	16	0.844			



Hair et al. (2021) recommended using a bootstrapping method, and therefore, t-values were obtained through bootstrapping with 5000 resamples. As indicated in Table 5, the results show a positive relationship between CE and SA ( $\beta = 0.310$ ,  $P < 0.01$ ) at a 1% significance level. Likewise, SA practices exhibit a positive association with OP ( $\beta = 0.826$ ,  $P < 0.01$ ) at a 1% significance level, supporting both  $H_1$  and  $H_2$ . Furthermore, the direct association between CE and OP is also positive ( $\beta = 0.141$ ,  $P < 0.05$ ) at a 5% significance level, thus supporting  $H_3$ .

In summary, the overall findings suggest that both CE and SA practices significantly and positively contribute to determining the performance outcomes of Jordanian ICT companies. Recognizing critiques of P-value standards, this study includes F-square ( $f^2$ ) values to account for effect size Table 5 presents F-sq values that support  $H_1$  ( $f^2 = 0.102$ ),  $H_2$  ( $f^2 = 0.421$ ), and  $H_3$  ( $f^2 = 0.02$ ), and show that each of the three direct relationships demonstrates considerable effect sizes, in accordance with Cohen's (1988) benchmarks of 0.02, 0.15, and 0.35 for small, medium, and large effects.

#### 4.4.1. Mediation analysis

Apart from direct effects, the structural model enables the analysis of mediating links. However, the path coefficients provided in Table 4 indicate a significant association between CE and SA. The results also highlight a substantial impact of SA on OP. Consequently, it can be inferred that CE has significant indirect connections with OP. Moreover, this study investigates the mediating effects by estimating the specific indirect impacts in the structural model. The findings, as presented in Table 6, disclose that CE ( $\beta = 0.265$ ,  $t = 6.380$ ,  $P < 0.01$ ) significantly and positively influences OP through the mediating role of SA. These results suggest that the impact of CE on OP is not solely direct but is also mediated by SA, thus supporting  $H_4$ .

## 5. DISCUSSION

In this investigation, the primary emphasis was on the impediments encountered in implementing CE within Jordanian ICT firms. Consequently, this article employs the RBV theory to dig into how ICT companies can harness their capabilities, resources, and entrepreneurial orientations to attain commercial benefits and enhance OP. This is especially pertinent in the context of a developing nation like Jordan, where organizations operate within a challenging economic and competitive milieu. In such

conditions, the strategic entrepreneurship mandates interventions to amalgamate resources, creating capabilities that strategically elevate performance levels.

The present study formulates a framework proposing that CE positively impacts OP through the intermediary role of SA. This paper adopts the RBV as a base to concretize a research framework for CE. Considering the outcomes, this research affirms all relationships posited within the model. Specifically, the findings indicate that CE contributes to the enhancement of OP. While this deduction may not be unexpected, considering that the components of CE aim to mold behavior, the distinctive value of this research lies in offering a more precise depiction of how CE exactly shapes OP. This detailed insight is pragmatically beneficial for managers and assists researchers in gaining a more nuanced understanding of the intricacies of CE.

This study contends that CE, which refers to the process of promoting entrepreneurial activities within established organizations, leads to improved performance outcomes. One key benefit of CE is its ability to foster creativity and innovation. By motivating employees to create and explore new opportunities, CE stimulates the development of novel products, services, and processes. In the context of the ICT sector, where technological advancements and market demands are constantly evolving, CE allows organizations to stay at the forefront of innovation, enhancing competitiveness and contributing to improved performance. The results of the present investigation also uncover that within Jordanian ICT companies, embracing robust strategic entrepreneurship empowers firms to generate, unearth, and capitalize on novel opportunities, thereby capturing value. The influence of CE on OP corresponds with the outcomes observed in several other studies (Albhirat et al., 2023; Boudreaux, 2020).

In the context of the ICT sector, limited research has investigated the CE-OP relationship. A study in Lebanon focusing on ICT adoption found a positive impact of CE on OP (Yunis et al., 2017). Similarly, Jardim-Goncalves et al. (2017) explored the importance of CE in ICT organizations, highlighting its role in driving organizational change. Furthermore, Bojica et al. (2017) examined the impact of acquired knowledge on CE, specifically in ICT SMEs, demonstrating a positive influence on organizational outcomes due to their dynamic, competitive, and complex nature. Building on existing literature, this study contributes to a deeper understanding of the positive impact of CE on OP in the Jordanian ICT sector. It achieves this by integrating quantitative instruments and considering both small and large ICT organizations.

The outcomes of the current investigation illustrate a robust correlation between CE and SA. This study underscores the imperative for a more robust integration of CE practices within

**Table 4: Discriminant validity (HTMT)**

	CE	OP	SA
CE			
OP	0.292		
SA	0.311	0.488	

**Table 5: Hypothesis testing direct effects**

Relationship	Beta	LL	UL	SE	T-stat	P-value	Result	R <sup>2</sup>	F2	Effect size
CE → SA	0.310	0.238	0.389	0.046	6.739	0.000	Significant	0.088	0.102	Small
SA → OP	0.826	0.779	0.868	0.097	8.515	0.000	Significant	0.702	0.421	Large
CE → OP	0.141	0.014	0.222	0.063	2.238	0.017	Significant	0.772	0.020	Small



**Table 6: Specific indirect effects**

Mediators	Beta	LL	UL	SE	T	Sig
CE -> SA -> OP	0.265	0.189	0.323	0.042	6.380	0.000

Jordanian ICT companies. The findings distinctly highlight the significant relationship between CE and SA. Notably, the results offer valuable insights, indicating that the pursuit of SA demands an escalation in certain entrepreneurial behaviors, with a primary focus on aspects like opportunity recognition—a crucial consideration for firms with an entrepreneurial mindset. The implications suggest that firms with an entrepreneurial orientation should institutionalize CE within their planning frameworks.

These findings align with prior research (Albhirat et al., 2023; Gast et al., 2017), advocating that CE serves as a precursor to SA. The study further affirms the mediating role of SA in the CE-OP relationship. Specifically, the results support the notion that SA acts as a transformative element, converting CE into OP. Interestingly, the research identifies a gap, as no prior studies have explored the mediating function of SA in the CE-OP relationship, consistent with the Resource-Based View (RBV) principle. The study emphasizes the explanatory power of the RBV, particularly in the context of technology companies in Jordan. It provides evidence supporting the idea that CE can be translated into OP through SA in Jordanian ICT firms. These results reinforce the broader understanding that CE plays a pivotal role in the entrepreneurial process. The results also align with the statement made by Kantur (2016) that SA becomes essential for CE to flourish inside an organization, particularly when dealing with complex management difficulties, including globalization, dynamic settings, rapid innovation, and mergers and acquisitions. Strategic decision-making procedures and their underlying qualities have to be reevaluated due to the changing nature of environmental uncertainty.

In general, existing literature supports the mediating role of SA in the impact of CE on OP. Govender (2020) conducted research that built upon prior studies highlighting the contingent nature of the CE-OP relationship (Rauch et al., 2009). This research aligns with the contemporary approach that dynamic capabilities, including SA, can influence the CE-OP relationship (Xing et al., 2020). Acknowledging the lack of consensus on the CE-OP impact in previous literature (Williams Jr et al., 2018), Govender suggests that mediating factors play a crucial role, contributing to conflicting findings. Moreover, literature underscores the importance of examining mediating effects to gain further insight into the CE-OP relationship, consistent with Govender's recommendation to consider SA as a mediating factor (Al-Taweel and Al-Hawary, 2021; Lumpkin and Dess, 1996). Overall, the literature strongly supports the significant mediating role of SA in the impact of CE on OP, emphasizing SA as a crucial mechanism through which CE influences OP.

## 6. CONCLUSIONS AND IMPLICATIONS

By formulating and validating a normative model, this study enhances our comprehension of the relation between corporate entrepreneurship and wealth creation. This model elucidates the

intricacies of the impacts of strategic agility, encompassing both its antecedents and consequences. The study's findings substantiate the Resource-Based View (RBV), indicating that corporate entrepreneurship can enhance organizational performance through the strategic utilization of strategic agility. Corporate entrepreneurship emerges as a distinct resource for identifying venture opportunities. Theoretical groundwork for strategic agility is established within the RBV, offering a logical framework to conceptualize the interplay between corporate entrepreneurship and strategic agility, consequently influencing organizational performance.

For Jordanian ICT companies, the ability to identify strategic agility alone is insufficient; leveraging it to advance organizational performance is imperative for creating value for customers and wealth for owners. The adoption of strategic agility becomes pivotal for engaging in both advantage-seeking and opportunity-seeking behaviors. This research's model also highlights the relevance of corporate entrepreneurship in Jordanian ICT companies, urging them to pursue new opportunities through entrepreneurial initiatives. It emphasizes the strategic management of resources to optimize organizational performance.

This study unveils noteworthy implications for managerial practices, urging a reconsideration of strategies facilitating corporate entrepreneurship. Effective programs should prioritize the developing dynamic capabilities over mere resource access, promoting simultaneous opportunity-seeking and advantage-seeking behaviors in corporate entrepreneurship. Managers are encouraged to cultivate an innovative environment that facilitates employees' creative endeavors by providing access to information, enabling quick evaluation and comparison of alternatives. Moreover, this research extends the existing literature by proposing that corporate entrepreneurship enhances organizational performance through the intermediary strategy of strategic agility. The firm's organizational innovation perception equips it with the ability to discern, analyze, and act upon market changes, translating such knowledge into tangible strategic actions that capitalize on emerging market developments and, consequently, elevate organizational performance.

### 6.1. Limitations and Future Research Direction

This paper acknowledges several limitations. Firstly, the use of a cross-sectional study design to gather data poses a constraint. Cross-sectional studies, conducted at a single point in time, provide a snapshot and do not establish dynamic associations (Reinartz et al., 2002). A longitudinal study, capable of tracking changes over time, would offer a more comprehensive understanding of the factors contributing to success or failure. Additionally, the focus of this study on a specific industry that is Jordanian ICT companies, may limit the generalizability of its findings to other industries.

Despite its limitations, this study holds potential value in laying the groundwork for future research. First and foremost, while theories discussed herein can serve as a basis for individual studies on corporate entrepreneurship, combining various theoretical tenets could enhance our comprehension regarding challenges of strategic entrepreneurship. For instance, a research effort that

integrates agency theories with strategic choices holds the potential to offer valuable insights. The strategic choices that entrepreneurs make to match corporate entrepreneurship with the competitive landscape are at the centre of strategic choice theory. Conversely, using agency-theoretic concepts to strategic entrepreneurship helps find alignments between institutions and entrepreneurs' goals, making it easier to investigate and take advantage of possibilities.

Additionally, the model established in this study is suggested for subsequent research to analyze its relevance across various sectors. Recognizing the importance of resource inputs at various organizational levels necessitates a reevaluation of how these diverse inputs interact with the orchestration processes of corporate entrepreneurship. The adoption of a diverse array of theories within the context of these inputs has the potential to enhance clarity in future studies.

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