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Enhancing organizational immunity: The impact of strategic agility, foresight, and entrepreneurship in the Baghdad electricity police directorate

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Abstract

Organizational immunity inside the Baghdad Electricity Police Directorate gets influenced by strategic agility through this investigation. The research investigates strategic foresight (SF) and strategic entrepreneurship (SE) as intermediate factors which help explain the relationship between strategic agility and organizational immunity (OI). Research findings from 120 middle-level managers validated the relationship between strategic agility and both organizational immunity and its two intermediary factors using PLS-SEM with WarpPLS statistical software version 7.0. The research established that organizations gain improved immunological capacity through strategic agility which becomes more powerful when combined with strategic foresight and strategic entrepreneurship. The research uses Dynamic Capabilities theory and Entrepreneurship Innovation and Resource-Based View (RBV) to provide Electricity Police Directorate with practical strategies that enhance their immunity alongside entrepreneurial spirit through strategic agility.

Keywords: Strategic agility, strategic entrepreneurship, organizational immunity, electricity police directorate

1. Introduction

Public safety depends on the Electrical Police Directorate because they guarantee electrical equipment functions correctly. The activities of these organizations stop both public fund misuse and resource misdirection in addition to public service inefficiencies. The Electrical Police Directorate actively fights against various crimes that involve electricity. These organizations need adaptiveness to effectively move through an evolving environment. The organizations must implement continuous assessment of their internal and external dynamics while they work on strengthening their current capabilities and fixing their identified weaknesses and gaps. The transformation process which leads to organizational development is called organizational immunity.

Similar to the human immune system, organizations possess inherent characteristics that define them and influence their ability to thrive. Strategic management becomes more comprehensive when it considers the concept of organizational immunity, which differentiates one organization from another (Alshwabkeh, 2021) [9]. Strategic agility is a crucial mechanism for ensuring organizational longevity, particularly in dynamic environments. It equips organizations to respond efficiently to changing variables and navigate conflicts without succumbing to disruptions (Abunaser *et al.*, 2023) [11]. This agility is metaphorically similar to the human immune system's ability to adapt and respond to threats.

For an agile Electrical Police Directorate in Baghdad, continuous adaptation to a dynamic environment is paramount. However, the specific effects of strategic agility on organizational immunity remain unclear. Moreover, Strategic foresight and strategic entrepreneurship are two key components of strategic agility. These elements enable organizations to make swift decisions and demonstrate flexibility in their operations, particularly within the Electrical Police Directorate. Notably, the impact of strategic agility on these aspects within the public sector has been under-researched (Arokodare, 2020; Sajdak, 2017) [12, 37].

Based on this gap in knowledge, we propose that strategic agility, strategic foresight, and strategic entrepreneurship can collectively influence organizational immunity. To explore this relationship further, we have designed a research model (Figure 1) specifically tailored to the Electrical Police Directorate in Baghdad.

This model will investigate the influence of strategic agility on organizational immunity, considering the mediating effects of the aforementioned variables. In light of these circumstances, the following research questions were formulated:

- What is the impact of strategic agility on organizational immunity within the Baghdad Electrical Police Directorate?
- How do strategic foresight and strategic entrepreneurship contribute to strategic agility within the Baghdad Electrical Police Directorate?
- What is the mediating role of strategic foresight and strategic entrepreneurship in the relationship between strategic agility and organizational immunity within the Baghdad Electrical Police Directorate?

This study seeks to understand the intricate relationship between strategic agility and organizational immunity. We posit that strategic foresight and strategic entrepreneurship serve as crucial intermediaries in this dynamic. The paper is organized as follows: Section 2 delves into the theoretical underpinnings of strategic agility, organizational immunity, strategic foresight, and strategic entrepreneurship. Section 3 presents the proposed research model and hypotheses. Section 4 outlines the methodological approach, including the research design, data collection techniques, and measurement instruments. Section 5 analyzes the empirical findings, drawing insights into the relationships between the variables. Section 6 provides conclusion points about research limitations together with contributions and recommended research directions for the future.

1. Theoretical underpinnings

1.1. Dynamic Capabilities Theory

An organization must develop dynamic capabilities according to Dynamic capabilities theory (DCT) to thrive in quickly changing conditions for enduring success. Teece and Shuen (1997) ^[45] explain that firms must master the process of combining and advancing along with reshaping their internal and external assets to achieve such capabilities. According to Teece (2007) ^[44] the dynamic resource and environment relationship creates competitive opportunities that ensure organization survival.

The three foundational premises form the foundation of DCT. For organizational success organizations must show expertise in detecting new chances and capitalizing on them. Organizations need to have the ability to use opportunities that they discover. The firm needs the capability to restructure its assets for sustaining competitive dominance. Esbach (2009) explains according to Arokodare and Asikhia (2022) ^[11] that organizational agility can be achieved by developing ability for knowledge acquisition and rapid responses and effective knowledge sharing and continuous process improvements. The development of flexible organizational cultures helps businesses to improve their performance while building resilient resource portfolios which allows them to succeed in competitive markets.

1.2. The Entrepreneurship Innovation Theory (EIT)

Schumpeter published groundbreaking studies about entrepreneurship which established entrepreneurs as resource amalgamators who use innovative methods in 1934 followed by another book in 1942. The pioneering outlook described by Schumpeter drives substantial business alterations because it enables fresh product creation together with production approaches and market entry and raw materials acquisition. In recent times Chepurenko (2015) among other scholars questions the validity of Schumpeter's claim that innovation exclusively belongs to entrepreneurial domains. Recent market competition brings innovation to such common use that it becomes challenging to separate transformative ideas from regular business activities. The analysis indicates several weaknesses with Schumpeter's theory because it focuses primarily on innovation yet ignores complex interactions of influencing economic variables. Evaluating particular industries together with their unique characteristics enables correct distinctions between transformational innovations and minor business improvements. From this viewpoint entrepreneurs can better grasp the diverse aspects of contemporary business entrepreneurship.

1.3. The Resource-Based View (RBV)

This research develops the theory of resource-based advantages' connections to firm growth while integrating key insights from Barney and Wernerfelt (1986, 1984) ^[46] and Penrose (1959) and Rubin (1973) ^[36]. A firm gains its competitive advantages through owning multiple valuable resources which prove difficult to duplicate or replace according to the Resource-Based View (RBV). Business success is enhanced when organizations utilize specific resources (Barney, 1991). The RBV of entrepreneurship reveals that founders' possession of valuable strategic resources including flexible workforce capabilities combined with advanced technology and market predictive power determines both innovative start-up success and fast growth along with competitive market advantage (Arokodare & Asikhia, 2020) ^[12]. The current research uses the RBV as its theoretical base.

2. Research context and hypotheses

2.1. Strategic Agility on Organizational Immunity

The Iacocca Institute at Lehigh University produced the "21st Century Manufacturing Enterprise Strategy" report in 1991 which first defined agile manufacturing and organizations. The rapid change requirements in management demanded strategic emphasis on agility because it enabled organizations to perform swift responses (AlShawabkeh, 2024) ^[8]. The research on agility began by concentrating on production system and supply chain agility but has evolved into a total organizational ability to adapt and respond to changes.

Organizations that demonstrate strategic agility (SA) abilities will achieve success in market competitions according to studies. The fundamental attributes of agile organizations include responsiveness along with competence and flexibility and speed as their major operational elements (Nagel & Dove, 1991; Fakanmoju *et al.*, 2020; Motalo *et al.*, 2023; Jasim *et al.*, 2024) ^[33, 32, 25, 18]. According to Hmood & Hasan (2021) ^[30] and Amini & Rahmani (2023) ^[10] organizations require the ability to adapt known as organizational immunity. An organization

demonstrates its ability to prosper through challenges when it acquires immunity traits. The research recommends two key approaches for achieving this goal: creating excellent performance and upgrading work processes and continual enhancement of operations. The results shape the following research hypothesis: Strategic agility leads to positive outcomes for organizational immunity.

2.2. Strategic Agility on Strategic Foresight

An organization exhibits strategic agility when it demonstrates instant change detection abilities for dynamic environments according to Arokodare (2020)^[12]. According to Kesebi (2019)^[27] organizations achieve resilience through anti-fragile system development to build their adaptability. Organizations require strategic foresight because this ability lets them anticipate upcoming trends and changes to achieve strategic agility according to Arokodare *et al.* (2020)^[12]. Arokodare and Asikhia (2020)^[12] discovered that strategic agility and strategic foresight have a positive relation in Nigerian organizations. Strategic agility shows a positive correlation with strategic foresight according to the results which form our hypothesis H2.

2.3. Strategic Agility and Strategic Entrepreneurship

Stevenson and Jarillo (1990)^[43] introduced strategic entrepreneurship as the method which amalgamates established strategic management techniques with the entrepreneurial style of proactive initiative. Strategic entrepreneurs explore beyond their current scope while driving innovation and taking measured risks to discover profitable chances that will achieve business targets (Al-Otaibi, 2020)^[6].

Strategic agility demonstrates it focuses on dynamically adapted strategic approaches for changing environments. The process of quick response modification occurs frequently by using alternative approaches as per Sajdak (2017)^[37] and Xing *et al.* (2020)^[47]. Strategic agility directly correlates to strategic entrepreneurship success according to Sajdak (2017)^[37] and Xing *et al.* (2020)^[47]. Strategic sensitivity along with flexibility and strong leadership combined with strategic decision-making abilities constitute the four core dimensions of strategic agility which explain this connection. Such organizational elements unite to enable organizations in finding and executing their best growth actions (Sajdak, 2017)^[37]. We hypothesize that strategic agility demonstrates a positive relationship with strategic entrepreneurship according to the potential capability of strategic agility to enable strategic entrepreneurship (H3).

2.4. Strategic Foresight on Organizational Immunity

According to Abunaser *et al.* (2023 as cited in Simmons 2013:1136)^[1] organizational immunity functions as an inherent organizational quality. The inherent organizational attribute enables organizations to survive external threats alongside changes that aim to eliminate them. The organization benefits from this protective shield which directly withstands unexpected challenges. Immunity reaches further than providing defense alone. Organizational immunity functions as defined by Hanvanich *et al.* (2012)^[21] and Hamidzadeh & Eghtesadi (2012)^[20] consists of four main abilities that strengthen organizational resilience.

A. Organizational Awareness: Detection of potential risks can be identified through this function.

Organizations maintain awareness of potential threats in the same way human bodies identify pathogens before disease outbreaks occur (Alhamdany, *et al.*, 2024)^[5].

- B. Organizational Defense:** The identification of threats allows organizational immunity to direct resources strategically for addressing potential challenges. Through this approach organizations can maintain necessary resources and workforce that enables efficient responses to disturbances.
- C. Organizational Memory:** Organization memory serves the same function as our bodies' infection-related information storage by systematically preserving past experiences through documentation and archiving. The ready access to stored information supports better crisis response management while encouraging organizational learning from accomplished results and prior setbacks.
- D. Mobilization and Response:** Organizations possessing strong protective capabilities can both leverage their assets and create prompt responses to address upcoming challenges (Alhamdany, *et al.*, 2024)^[5]. The organization can achieve efficient problem-solving and rapid recoveries as well as reduce disruption effects through this approach.

Strategic foresight receives new interpretation from Sarpong *et al.* (2018)^[38] who introduce "distentive capability." The principle of stretching organizational mental awareness between past recollections (memory) and anticipated future insights proves congruent with fundamental aspects of organizational immunity. Zyglidopoulos and Schreven (2009)^[49] confirmed that strategic foresight produces positive outcomes that strengthen organizational immunity. Strong organizational strategic foresight allows entities to both predict upcoming challenges and create proactive solutions which leads to enhanced immunity for better organizational resilience.

2.5. Strategic Entrepreneurship And Organizational Immunity

According to Ziyae & Sadeghi (2020)^[48] and Alshagawi & Mabkhot (2024)^[7] strategic entrepreneurship defines the process of exploring market opportunities through resource management to establish enduring competitive advantages. The resource-based view shares core elements with strategic entrepreneurship since it focuses on organizational success through internal capabilities as shown in Teece (2017)^[44] and Roundy and Bayer (2019)^[35]. Research by Hiitt *et al.* (2001) received expansion when Ireland *et al.* (2003) established their conceptual model of strategic entrepreneurship (SE). Five fundamental elements make up the conceptual model of strategic entrepreneurship including entrepreneurial mindset, culture, leadership, strategic resource management and creativity-based innovation fostering.

Strategic entrepreneurship serves as an organizational foundation according to Abu Borhom (2022). Effortful resource management and strategic opportunity detection enable organizations to establish the capability of disruption readiness and extended performance. Organizational immunity receives strategic entrepreneurship as its performance-based catalyst. The proposed linkage supports our research assumption that strategic entrepreneurship creates positive relations with organizational immunity.

2.6. Strategic Foresight As Mediating

Strategic agility functions as an essential element for developing strategic foresight according to Arokodare and Asikhia (2022) ^[11]. Strategic foresight represents a crucial advantage for different sectors including business and both government and social innovation communities (Mahmood *et al.*, 2021) ^[30]. Cognitive tools known as strategic foresight help decision-makers evaluate system flexibility while estimating key consequences from different choices thus allowing organizations to foresee upcoming challenges effectively. Strategic foresight functions similarly to how human health benefits from the addition of vitamins C and D according to Zyglidopoulos and Schreven (2009) ^[49].

The groundwork of strategic agility forms positive relationships and strategic foresight acts as a converting mechanism that transforms agility into organizational immunity across all business units to achieve desired results. The relationship between strategic agility and organizational immunity is mediated by strategic foresight according to the presented hypothesis (H6).

2.7. Strategic entrepreneurship as mediating

Results demonstrate that strategic agility possesses positive links to organizational immunity. Sajdak (2017) ^[37] defines strategic entrepreneurship as the vital element that drives organizational adaptability which itself serves as a main factor of workplace agility. Strategic entrepreneurship provides substantial contributions to both project and functional agility according to Ziyae & Sadeghi (2020) ^[48] and Morgan *et al.* (2016) ^[31]. The main goal of this entrepreneurial approach targets both competitive enhancement and discovery of fresh business prospects (Abu Borhom, 2022).

Interestingly, Abu Borhom also suggests that a strategic entrepreneurial configuration serves as the foundation of an organization's immunity. Given these connections, we propose that strategic entrepreneurship acts as a mediator in the relationship between strategic agility and organizational immunity. In other words, strategic entrepreneurship may be the mechanism through which strategic agility fosters organizational immunity. H7: Strategic entrepreneurship mediates the relationship between strategic agility and organizational immunity.

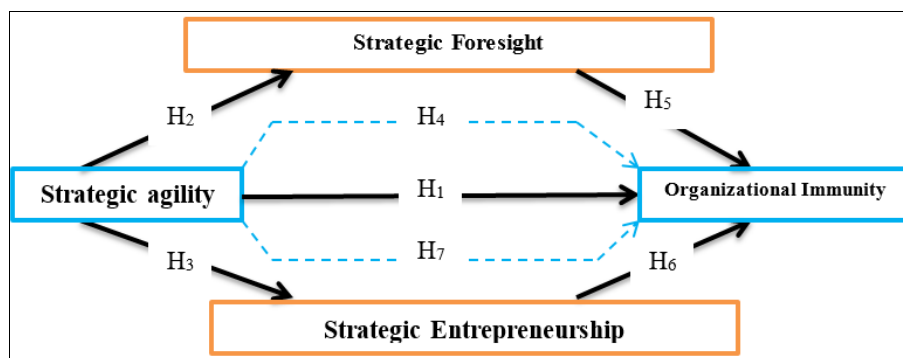


Fig 1: Proposed research model

3. Methodology

This study investigated the roles of strategic agility, strategic foresight, and strategic entrepreneurship in enhancing organizational immunity within the Electricity Police Directorate (EPD) of the Ministry's Agency for Federal Security Affairs. The target population included middle-level managers such as department heads, division managers, and unit managers (n=135). For Data Collection, A web-based questionnaire was the primary tool for data collection, reflecting the growing popularity of online surveys in quantitative research. The questionnaire design drew upon a comprehensive literature review to identify established measures for each construct. About Questionnaire Structure, the questionnaire comprised five sections: Demographics: This section collected basic information about the participants, including age, educational background, employment type, job title, and experience within the EPD. Strategic Agility: A six-item scale adapted from Harraf *et al.* (2015) ^[22] measured strategic agility. Three sample items from the study included: "The EPD has a clear vision for its future goals" and "Supervisors and management have sufficient resources to manage operations" and "Leaders are empowered to make decisions within their scope of work." Participants used a 5-point scale anchored by 1 and 5 to indicate their agreement with items. An excellent internal consistency value found in this instrument was $\alpha=0.873$. Strategic

Foresight was measured through six items created by Moqaddamerad and Ali (2024) ^[30] in their scale development work. Sample items included: "The EPD communicates alternative future strategies across the entire organization." This scale also demonstrated excellent internal consistency ($\alpha = 0.908$). Strategic Entrepreneurship: Measurement of strategic entrepreneurship relied on a modified six-item scale based on established scales by Kantur (2016) ^[26] and Soomro & Shah (2020) ^[42]. An example item is: "The EPD actively seeks resources to enhance its ability to confront challenges." This scale exhibited exceptional internal consistency ($\alpha = 0.941$). Organizational Immunity: A six-item scale adapted from Huang (2013) measured the EPD's organizational immunity. Sample items included: "The EPD conducts brainstorming sessions to analyze deviations and identify solutions." The internal consistency of this scale was very high ($\alpha = 0.903$). For Content Validity and Reliability, to ensure the accuracy and relevance of the questionnaire content, five hospitality scholars reviewed the survey content. Based on the feedback received, some questionnaire statements were revised to enhance clarity. Finally, for Sampling and Data Collection Period, A non-probability convenience sampling technique was employed to collect data. This approach is often used when cost is a factor and maximizing response rates is crucial (Black, 1999). Data collection spanned nearly two months (May-August 2024). While 130 completed forms

were received, only 120 were deemed valid for statistical analysis. This aligns with the recommendation by Hair *et al.* (2019) ^[19] regarding a sample size of 100-150 for maximum likelihood estimation (MLE).

This study examined the roles of strategic agility, strategic foresight, and strategic entrepreneurship in bolstering organizational immunity within the Electricity Police Directorate (EPD) of the Ministry's Agency for Federal Security Affairs. The target population consisted of middle-level managers, including department heads, division managers, and unit managers (n=135). Data collection was primarily conducted through a web-based questionnaire, reflecting the increasing popularity of online surveys in quantitative research. The questionnaire development used established measures found in an extensive literature review for each construct. The questionnaire contained five organized sections:

- **Demographics:** The research phase began by collecting fundamental participant data points which included age alongside education details as well as job type and title along with their time spent at the Electrical Police Directorate (EPD).
- **Strategic Agility:** The research utilized six items from Harraf *et al.* (2015) ^[22] to measure strategic agility. The EPD maintains a specific vision regarding its upcoming organizational targets which serves as one of the survey items. The organization provides both management and supervisors with necessary resources for operational management along with decision-making autonomy to leaders within their designated responsibilities. Participants responded on a five-point Likert scale that originated with strongly agree at one end and strongly disagree at the other. The scale demonstrated exceptional internal reliability through an $\alpha = 0.873$.
- **Strategic Foresight:** The measurement scale for strategic foresight consisted of six items created by Moqaddamerad and Ali (2024) ^[30]. Through the EPD the organization implements effective methods to transmit alternative future strategies across all organizational departments. The scale achieved significant internal reliability because its alpha coefficient reached 0.908.
- **Strategic Entrepreneurship:** Strategic entrepreneurship was measured using a modified six-item scale adapted from established scales by Kantur (2016) ^[26] and Soomro & Shah (2020) ^[42]. An example item is: "The EPD actively seeks resources to enhance its capacity to address challenges." This scale exhibited exceptional internal consistency ($\alpha = 0.941$).
- **Organizational Immunity:** A six-item scale adapted from Huang (2013) measured the EPD's organizational immunity. Sample items included: "The EPD conducts brainstorming sessions to analyze discrepancies and identify solutions." The internal consistency of this scale was very high ($\alpha = 0.903$).
- **Content Validity and Reliability:** To ensure the accuracy and relevance of the questionnaire content, five hospitality scholars reviewed the survey items. Based on their feedback, certain questionnaire statements were revised to improve clarity and comprehensiveness.

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Table 1: Shows the demographic characteristics of the respondents.

Characteristic	Distribute	No.	%
Gender	Female	2	1.7
	Male	118	98.3
Age	Less than 35 years	33	27.5
	36-45	70	58.3
	45-55	17	14.2
Educational attainment	High school degree or equivalent	65	54.2
	University degree	53	44.2
	Postgraduate degree	2	1.7
Type of working	Technician	1	0.8
	Administrator	116	96.7
Current position	Department heads	12	10.0
	Division managers	57	47.5
	Unit managers	51	42.5
Working experience	Less than 6years	6	5.0
	10-6 years	23	19.2
	11-15 years	63	30.0
	16-20	40	33.3
	Greater than 21	15	12.5

1.1. Data Analysis

To test the proposed study model, the Partial Least Squares Structural Equation Modeling (PLS-SEM) approach was employed. The PLS technique provides excellent solutions for explorative research studies which analyze new correlations while not fulfilling multivariate normality criteria (Acedo & Jones, 2007; Ainuddin *et al.*, 2007; Birkinshaw *et al.*, 1995) ^[2, 3, 15]. The researchers used WarpPLS as the statistical analysis software. WarpPLS represents an easy-to-use application tool created explicitly for PLS-SEM that features dependable capabilities and an interactive interface.

1.2. Results

1.2.1. Measurement model

The evaluation of the proposed four-factor model depended on ten model fit indices assessed through Kock's (2021) framework. Ten diverse measurement criteria from Table (2) serve to evaluate how well the model represents the data. Multiple fit indices are required because they ensure that model evaluation produces trustworthy results. The results presented in Table (2) show that the proposed model satisfactorily reproduces the data. The positive outcome reveals that the model functions as an accurate estimate for the original interconnections among variables.

Table 2: Model fit and quality indices

Measure	Assessment	Criterion	Result
Average Path Coefficient (APC)	0.499, p < 0.001	p < 0.05	Yes
Average R-squared (ARS)	0.656, p < 0.001	p < 0.05	Yes
Average Adjusted R-squared (AARS)	0.652, p < 0.001	p < 0.05	Yes
Average Block VIF (AVIF)	3.089	Acceptable if ≤ 5, ideally ≤ 3.3	Yes
Average Full Collinearity VIF (AFVIF)	3.899	Acceptable if ≤ 5, ideally ≤ 3.3	Yes
Tenenhaus GoF (GoF)	0.639	Small ≥ 0.1, medium ≥ 0.25, large ≥ 0.36	Yes
Simpson's Paradox Ratio (SPR)	1.000	Acceptable if ≥ 0.7, ideally = 1	Yes
R-squared Contribution Ratio (RSCR)	1.000	Acceptable if ≥ 0.9, ideally = 1	Yes
Statistical Suppression Ratio (SSR)	1.000	Acceptable if ≥ 0.7	Yes
Nonlinear Bivariate Causality Direction Ratio (NLBCDR)	1.000	Acceptable if ≥ 0.7	Yes

To further validate the proposed research model, a confirmatory factor analysis (CFA) was conducted. The results presented in Table 3 demonstrate the reliability and validity of the study's constructs. The composite reliability (CR) for all constructs exceeded 0.70, and item loadings were consistently above 0.50 (p < 0.05), indicating strong internal consistency and significant contributions from individual items. Moreover, the average variance extracted

(AVE) values for strategic agility; organizational immunity, strategic foresight, and strategic entrepreneurship were all above 0.50, confirming the model's convergent validity. Finally, the model was assessed for common method bias using variance inflation factors (VIFs). All VIF values were below 3.3, suggesting that common method bias was not a significant issue in this study.

Table 3: Item loadings, Cronbach alpha, CR, AVE, and VIFs

Factors	Item loading	Cronbach alpha	CR	AVE	VIFs
Strategic agility (SA)					
	-				
1- The Directorate has a future vision regarding what it seeks to achieve	0.727	0.873	0.824	0.534	3.173
2- The directorate has sufficient human resources to run things	0.780				
3- Strategic planning efforts help in anticipating future possibilities affecting the directorate's performance	0.765				
4- Leaders are given delegation of powers and decision-making within the scope of work	0.707				
5- The Directorate analyzes the internal work environment to discover strengths and weaknesses.	0.626				
6- Assessment of the resources necessary to exploit opportunities.	0.770				
Organizational immunity (OI)					
	-				
1- The Directorate works to train workers to develop their skills according to a programmed methodological plan.	0.824	0.903	0.869	0.610	3.086
2- The Directorate holds brainstorming sessions to analyze the deviations and find solutions to them	0.625				
3- The Directorate uses its memory when making its decisions	0.789				
4- The Directorate adopts a flexible organizational structure	0.858				
5- The Directorate recalls its previous experiences from memory to avoid deviations	0.743				
6- The Directorate adopts the management by exception approach	0.823				
Strategic foresight (SF)					
	-				
1 Discovering new opportunities	0.807	0.908	0.878	0.621	3.035
2 Identifying uncertainties and/or scenarios	0.757				
3 Prioritization of the future opportunities	0.763				
4 Making choices for the firm's strategic direction	0.824				
5 Communicating the alternative future strategies throughout the whole firm	0.783				
6 Monitoring the emerging future and adjusting as needed	0.794				
Strategic entrepreneurship (SE)					
	-				
1 The directorate has a leadership with a future vision.	0.839	0.941	0.925	0.727	3.197
2 The Directorate applies basic strategies to develop performance.	0.865				
3 The Directorate encourages the spirit of initiative and risk-taking in all areas of its work	0.867				
4 The Directorate seeks to provide material resources to increase its ability to confront	0.847				
5 Benefiting from previous strategic decisions that have proven effective in making current strategic decisions	0.845				
6 Trying to develop solutions to problems in innovative ways.	0.853				

The study further validates the robustness of the measurement model through strong convergent and discriminant validity. The high average variance extracted (AVE) values demonstrate that each construct is adequately represented by its indicators. Moreover, the AVE values and the heterotrait-monotrait ratio (HTMT) criteria (Tables 4

and 5) support the distinct nature of the constructs. This evidence of convergent and discriminant validity is critical for ensuring the reliability and validity of the measurement model, ultimately leading to more meaningful and accurate research conclusions.

Table 4: Discriminant validity results

Constructs	SA	OI	SF	SE
Strategic agility (SA)	0.731	0.765	0.770	0.721
Organizational immunity (OI)	0.695	0.781	0.748	0.806
Strategic foresight (SF)	0.710	0.748	0.788	0.778
Strategic entrepreneurship (SE)	0.721	0.706	0.768	0.853

Table 5: HTMT for validity

HTMT ratios (good if < 0.90, best if < 0.85)	SA	OI	SF	SE
Strategic agility (SA)				
Organizational immunity (OI)	0.815			
Strategic foresight (SF)	0.802	0.832		
Strategic entrepreneurship (SE)	0.828	0.782	0.846	
P values (one-tailed) for HTMT ratios (good if < 0.05)	SA	OI	SF	SE
Strategic agility (SA)				
Organizational immunity (OI)	<0.001			
Strategic foresight (SF)	<0.001	0.004		
Strategic entrepreneurship (SE)	0.004	<0.001	0.005	

1.2.2. Results of testing hypotheses

As depicted in Figure 2, strategic agility (SA) has a positive and significant influence on organizational immunity (OI) ($\beta=0.25$, $p<0.01$), strategic foresight (SF) ($\beta=0.80$, $p<0.01$), and strategic entrepreneurship (SE) ($\beta=0.73$, $p<0.01$). These findings support hypotheses H1, H2, and H5. Additionally, OI is positively influenced by SF ($\beta=0.42$, $p<0.01$) and SE ($\beta=0.30$, $p<0.01$), suggesting that when SF and SE are high,

OI tends to be high, supporting hypotheses H3 and H6. Furthermore, SA explains a substantial portion of the variance in SF ($R^2=0.63$) and SE ($R^2= 0.54$). Collectively, SA, SF, and SE explain a significant 80% of the variance in organizational immunity. These results underscore the importance of strategic agility in fostering organizational resilience and adaptability.

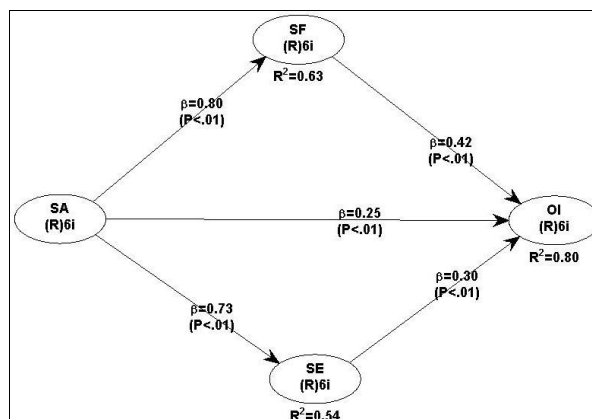


Fig 2: Final model of the study

To examine the mediating roles of strategic foresight (SF) and strategic entrepreneurship (SE) in the relationship between strategic agility (SA) and organizational immunity (OI), this study utilized the well-established method developed by Preacher and Hayes (2008) [34]. People widely acknowledge this approach as dependable and suitable for mediation analysis.

The calculations for SF and SE indirect effect confidence intervals on SA-OI relationship utilized bootstrapping procedures. New data from Table 5 backs up the two proposed hypotheses firmly:

H4 (SF as mediator): The indirect effect of SF on the SA-OI relationship is significant (t-value = 5.793; LL = 0.222, UL = 0.450), indicating that SF partially mediates this relationship.

The research demonstrates that SE functions as a full mediator between SA and OI based on the significant indirect effect (t-value = 3.712; LL = 0.103, UL = 0.335). The positive relationship between strategic agility and organizational immunity receives its mediation through strategic foresight and strategic entrepreneurship.

Table 5: Mediation analysis results

	Path a	Path b	Indirect Effect	SE	t-value	Bootstrapped Confidence Interval		Decision
						95% LL	95% UL	
SA→ SF→ OI	0.800	0.420	0.336	0.058	5.793	0.222	0.450	Mediation
SA→ SE→ OI	0.730	0.300	0.219	0.059	3.712	0.103	0.335	Mediation

1.3. Discussion

The authors examined how strategic agility works to

strengthen the immune system of the Baghdad Electricity Police Directorate (EPD). Strategic foresight along with

strategic entrepreneurship act as partial mediators between strategic agility and organizational immune effectiveness.

Research outcomes support the positive impact strategic agility makes on organizational immunity which other experts (Hmood & Hasan, 2021; Amini & Rahmani, 2023) [30, 10] have also discovered. Modern business survival depends heavily on organization agility which fuels both survival and positive outcomes. Organizations adopt strategic agility to detect upcoming alterations in service choices and technology shifts and regulatory demands thus enable them to keep ahead of market trends. By making their immunity stronger the organization can successfully navigate through challenges (AlShawabkeh 2024) [8]. Strategic agility develops strategic foresight according to research findings which are supported by Arokodare & Asikhia (2022) [11].

Agile organizations obtain superior performance by transforming their strategies business models and operational approaches to tackle future situations. The ability to transform swiftly allows companies to spot upcoming threats and opportunities which their competitors cannot and to swiftly adjust their operational capabilities toward changing organizational needs. Strategic agility demonstrates positive effects on strategic entrepreneurship according to research findings that align with Sajdak (2017) [37]. Strategic agility builds an organizational culture that accepts planned entrepreneurial risks together with change and innovation. Agile organizations develop collaborative settings which enable staff to produce quality work that upholds entrepreneurial organizational goals when operations occur in a rapidly evolving environment.

This research verifies that strategic entrepreneurship functions as a medium which affects the link between strategic agility and organizational immunity in alignment with Ziyae & Sadeghi (2020) [48]. The mediating function leads organizations to achieve better outcomes. Organizational outcomes from such studies depend heavily on the adequate backing of managers and leaders in the EPD. The study shows through its empirical findings that strategic foresight functions as a mediator that upholds the logic presented by Mahmood *et al.* 2021 [30]. Organizations that use strategic foresight to detect potential risks will be able to turn their organizational immunity system on and protect themselves better from upcoming challenges. The unique behavioral contribution of this research appears through its investigation of these mediation effects inside the EPD organization. This study demonstrates why the EPD must develop its organizational immunity by implementing strategic agility with strategic foresight and strategic entrepreneurship to build resilience.

3.3. Theoretical implications

The examination generates significant findings about strategic agility practice for public service organizations specifically within the Baghdad Electricity Police Directorate. This study improves understanding of strategic agility through its analysis of strategic foresight as well as strategic entrepreneurship relationships.

The research strengthens all three themes of Dynamic Capabilities theory and Entrepreneurship Innovation Theory and Resource-Based View by exploring their complex interactions when considering strategic agility. Strategic foresight along with strategic entrepreneurship work as means to transform strategic agility into actual

organizational resistance within service industries that require quick adaptation against evolving client requirements and technological developments.

The study offers real-world advice to organizations which want to develop organizational immunity through a strategic foresight implementation framework along with entrepreneurial culture development. This research takes capability development and utilization understanding past simple change adaptation to show organizations must prepare for upcoming business threats and potential opportunities. Specific organizational insights emerge from the findings which help service sector companies deal with their complex environment during times of changing consumer expectations. Organizations that develop foresight together with entrepreneurial initiatives will succeed in adaptive changes occurring in their dynamic environments.

3.4. Practical implications

Organizations must actively study and deploy these concepts for complete utilization of their benefits. Organizations will enhance their sustainability through long-term success by properly integrating such principles into their operational framework. The innovative research approach provides a complete examination of the concepts which advances current scholarly understanding in this particular field.

3.5. Limitations and future research

These research findings derive from the Baghdad Electricity Police Directorate of Iraq. The specific context of Electricity Police Directorate in Baghdad prevents researchers from directly applying these findings to other organizations outside its area or other regions. The research used sole cross-sectional data which provides only a single momentary view of the examined relationships. Additional research using longitudinal data will help reveal complete information about the relationships in question. Only the officers in the Directorate received examination in this research because the study selected this division as its sole focus. Further investigation should add additional staff members within the Directorate's operations to extend its research scope.

The analysis studied the various relationships between strategic agility and organizational immunity and strategic foresight and strategic entrepreneurship but it did not explore each comprehensive element of these concepts. Future studies should investigate more internal elements which impact how strategic agility relates to organizational immunity.

4. Conclusion

Modern business survival depends heavily on organizational agility, which drives both survival and positive outcomes. Organizations that embrace strategic agility can anticipate changes in service offerings, technological shifts, and regulatory demands, thereby staying ahead of market trends. Strengthening organizational immunity enables companies to successfully navigate challenges (AlShawabkeh, 2024). Research, such as that by Arokodare & Asikhia (2022), supports the idea that strategic agility enhances strategic foresight.

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