

THE IMPACT OF STRATEGIC VIGILANCE ON INSTITUTIONAL PERFORMANCE THROUGH STRATEGIC PHYSIOGNOMY AS A MEDIATING VARIABLE

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ABSTRACT

Purpose: This study investigates the direct and indirect impacts of strategic vigilance on the institutional performance of Yemeni agricultural investment institutions, with strategic physiognomy serving as a mediating variable.

Methodology/Approach: Data were collected from 184 upper, middle, and specialized management personnel through a survey-based approach.

Findings: Factors The results reveal that strategic vigilance significantly and positively impacts both strategic physiognomy and institutional performance. Furthermore, strategic physiognomy partially mediates the relationship between strategic vigilance and institutional performance.

IMPLICATIONS: These findings underscore the crucial role of strategic vigilance in enhancing institutional performance. The study recommends that institutions foster strategic vigilance and physiognomy by cultivating an organizational culture that encourages open communication, knowledge sharing, innovation, and adaptability, along with maintaining flexible strategy review mechanisms to respond effectively to external environmental changes.

Limitations of the Study: This study has several limitations. The cross-sectional design limits the ability to infer causality, and self-reported measures may introduce biases despite efforts to minimize them. In addition, the study did not consider other potential mediators or moderators, such as organizational culture or environmental uncertainty, which future research can explore.

Originality/Value of paper: This research contributes to a deeper understanding of how strategic management practices can influence organizational outcomes, offering valuable insights for managers in the agricultural sector and beyond. The proposed framework can be applied to improve institutional performance in diverse settings.

Keywords: Strategic vigilance; Strategic physiognomy; institutional Performance; Agricultural Institutions; Agricultural Sector; Yemen.

1 INTRODUCTION

In today's dynamic and competitive global landscape, institutions face continuous pressure to adapt and develop effective strategies to enhance their performance. Institutional performance is critical for achieving organizational objectives, reflecting the efficiency of internal operations and the ability to interact effectively with the external environment. It is manifested in an institution's capacity to execute strategies effectively, enabling it to compete successfully and maintain market presence (Dahman, Houshin, 2021: 356).

Strategic vigilance, the ability of an institution to gather and analyze information about its external environment, is a vital tool for identifying opportunities and mitigating potential threats (Dawood, 2019). Research indicates that strategic vigilance facilitates information flow, enhances organizational awareness, and positively influences performance (Maslah et al., 2021). Al-Kassaba (2011) defines institutional performance as an integrated system of outcomes resulting from the interaction between an enterprise and its internal and external environments.

Strategic physiognomy, a contemporary approach, enables leadership to understand and motivate employees to achieve high-performance indicators. Defined as "leadership practices that involve monitoring individuals' personal characteristics" (Al-Rubai, 2021: 72), strategic physiognomy is an

essential tool for organizational environmental analysis and understanding employee psychology (Hussain, 2018). By identifying individual strengths and weaknesses, strategic physiognomy allows leaders to align efforts with the changing demands of the environment (Al-Sabouni and Al-Hamdani, 2023: 156). In addition, Al-Kahrabaji et al. (2022: 278) highlight the importance of physiognomy in decision-making, equipping organizations to adapt to change and overcome challenges.

Strategic vigilance provides valuable information about market trends, technological advancements, and customer needs. Strategic physiognomy, on the other hand, allows leaders to analyze employee psychological and behavioral traits, leading to a better understanding of their capabilities and needs. This combined knowledge base facilitates effective strategy development and resource allocation, enhancing organizational responsiveness to rapid environmental changes.

This study posits that strategic physiognomy mediates the relationship between strategic vigilance and institutional performance. Therefore, understanding this dynamic interplay is crucial for designing innovative strategies that enable organizations to improve innovation, operational efficiency, and market competitiveness. This research explores how investment institutions in the Yemeni agricultural sector can enhance their performance by effectively leveraging available information, thereby improving their competitiveness in the face of ongoing challenges.

This study aims to provide insights into the impact of strategic vigilance and strategic physiognomy on institutional performance. These insights can assist managerial leadership in the Yemeni agricultural sector in adopting innovative, knowledge-based strategies that contribute to the sustainable growth of organizations operating within this dynamic and challenging environment.

1.1 Problem Statement and Research Questions:

The agricultural sector is a cornerstone of Yemen's national economy, contributing approximately 17.6% to the GDP. It sustains the livelihoods of about 73.5% of the population and employs over half of the national workforce (approximately 52%) (UN Food Systems Pathways Report, 2022: 13).

Despite its importance, the Yemeni agricultural sector faces significant challenges that have negatively impacted its sustainability and effectiveness. Al-Sanawi et al. (2020) highlight a deficiency in agricultural development, leading to increased food deficits. Locally produced grain quantities have decreased substantially, from 910,000 tons in 2012 to 357,000 tons in 2018. Similarly, local wheat production declined from 5.9% in 2012 to 3.2% in 2018. These declines suggest a lack of effective strategies impacting the overall performance of agricultural institutions.

While numerous studies suggest a positive relationship between strategic vigilance and institutional performance (Al-Dhafri & Al-Ashwal, 2024; Turki & Mohamed, 2023; Nubia, 2023; Balbol & Dabbagh, 2022; Maslah et al., 2021; Abu Aql, 2019; Sowaid & Zaghdhi, 2018; Dawood & Abbas, 2018), reinforcing the hypothesis that strategic vigilance plays a crucial role in enhancing institutional performance in the Yemeni agricultural sector, research on strategic physiognomy, despite its vital role, remains limited compared to other management fields. Existing research, however, indicates positive impacts of strategic physiognomy on institutional performance. Studies by Fadhil et al. (2024) and Abdullah (2024) demonstrate significant positive effects and relationships, respectively, between strategic physiognomy and institutional performance. Other studies have examined the impact of strategic physiognomy on organizational excellence (Ali et al., 2023), organizational reputation (Al-Dabhaoui & Al-Futlawi, 2023), organizational success (Soluman & Jamal, 2023), quality of educational services (Al-Sabouni & Al-Hamdani, 2023), and strategic leadership (Al-Kahrabaji et al., 2022).

Although previous studies have investigated these variables individually or in dual relationships, a comprehensive examination of the impact of strategic vigilance (as an independent variable) on institutional performance (as a dependent variable) through strategic physiognomy as a mediating variable is lacking. This study aims to bridge this gap by exploring this mediating relationship within Yemeni agricultural institutions. This investigation will contribute to a more robust theoretical framework and offer practical solutions to performance issues in the Yemeni agricultural sector.

Therefore, this study seeks to answer the following research questions:

1. What is the level of availability of strategic vigilance, strategic physiognomy, and institutional performance in Yemeni agricultural institutions?
2. Does strategic physiognomy mediate the relationship between strategic vigilance and institutional performance in these institutions?

1.2 Objectives of the Study

This study aims to investigate the impact of strategic vigilance on institutional performance in Yemeni agricultural institutions, mediated by strategic physiognomy. The specific objectives are:

1. To assess the current levels of strategic vigilance, strategic physiognomy, and institutional performance in Yemeni agricultural institutions.
2. To determine the mediating role of strategic physiognomy in the relationship between strategic vigilance and institutional performance.

1.3 Significance of the Study

This study is significant for the following reasons:

- A. It develops an integrated theoretical framework that enhances understanding of the relationships between strategic vigilance, strategic physiognomy, and institutional performance.
- B. It provides practical recommendations for improving institutional performance in the Yemeni agricultural sector.

2 LITERATURE REVIEW

This study draws upon several core theories to understand how competitive advantage is achieved within organizations. The Resource-Based View (RBV) serves as the foundational lens, emphasizing the crucial role of resources and capabilities in organizational performance. Several key theories underpin this perspective:

- Internal Resources Theory: Building on the work of Barney (1986) and Wernerfelt (1984), this theory (as elaborated by Bawazeed, 2012) encompasses both tangible and intangible assets. Barney further categorized resources into physical capital, human capital, and organizational capital (Nouri & Khameje, 2019).
- Core Competencies Theory: Hamel and Prahalad (1989) posit that core competencies reflect collective organizational knowledge, driven by a strategic intent focused on achieving specific goals (Abdullah & Kahina, 2015).
- Dynamic Capabilities Theory: Teece and Pisano (1997) highlight knowledge as a strategic resource contributing to competitive advantage (Tarfa, 2019).

Beyond the RBV, this study also incorporates:

- Path-Goal Theory: House and Evans (1970-1971) emphasize the leader's role in fostering a supportive work environment conducive to job satisfaction (Al-Bayati, 2022). This theory identifies four leadership styles: directive, supportive, achievement-oriented, and participative (Al-Safary, 2021).
- Organizational Learning Theory: Simon (1991) outlines four key elements: knowledge acquisition, information dissemination, information interpretation, and organizational memory (Al-Zalmi, 2010).

These theories provide a robust framework for the study. They facilitate the development of a comprehensive conceptual model, enabling a thorough understanding of the dynamic relationships between the study variables. By carefully integrating these theories with findings from prior research, this study not only clarifies the conceptual model and inter-variable relationships but also supports the proposed hypotheses, enhancing the study's quality and contributing to the field's knowledge base.

2.1 The Relationship Between Strategic Vigilance and Institutional Performance

A body of research demonstrates how strategic vigilance influences institutional performance. Dawood & Abbas (2018) suggest that strategic vigilance improves institutional performance by enhancing information provision and fostering a marketing culture. This aligns with the RBV, which considers information a fundamental resource for enhancing performance.

Bulbul and Dabbah (2022) confirm the role of strategic vigilance in improving institutional performance by providing information necessary for understanding the competitive environment. This understanding, derived from vigilance, enhances an institution's ability to adapt and innovate, leading to improved performance. The RBV supports this by suggesting that environmental understanding improves resource utilization, contributing to better institutional performance.

Turki & Mohamed (2023) highlight strategic vigilance and employee performance as critical for organizational success. This aligns with Core Competencies theory, which emphasizes the importance of directing employee efforts and achieving performance improvement, reflecting the idea that collective knowledge and coordinated efforts contribute to institutional success.

The Path-Goal theory is also relevant here, emphasizing the importance of leadership in enhancing organizational performance. Strategic vigilance can enhance employee performance and strengthen competitive capacity. This link between vigilance and individual response demonstrates how improved individual performance contributes to organizational performance.

Ben Aql (2019) emphasizes the importance of strategic vigilance in institutional adaptation to external challenges. The Dynamic Capabilities theory highlights how institutions use knowledge and strategic vigilance to adapt to rapid environmental changes, thereby enhancing their ability to innovate and achieve competitive advantage.

Nabawiya (2023) shows that strategic vigilance contributes to achieving organizational goals, reflecting its direct impact on organizational performance. This aligns with Organizational Learning theory, which highlights the importance of knowledge acquisition, information interpretation, and dissemination for achieving goals and enhancing organizational adaptability.

2.2 The Relationship Between Strategic Vigilance and Strategic Physiognomy

Strategic vigilance, the comprehensive analysis of the external and internal environments for informed decision-making, and strategic physiognomy, the capacity for vision and predicting future market trends and challenges, are related but distinct concepts. While both are important, research specifically exploring

their interrelationship is limited. This section analyzes the potential connections between them, examining how each influences the organization.

Seredi and Boujemaa (2019) suggest that strategic vigilance enhances creative thinking and adaptability to future changes. This indicates that a robust system for monitoring changes contributes to improved strategic physiognomy, fostering creativity and innovation. This aligns with Internal Resources Theory, as investing in organizational cognitive resources enhances innovation and adaptability.

Furthermore, Shaush and Luabdia (2017) affirm that strategic vigilance enhances communication between the organization and its external environment, enabling informed and effective decision-making amidst changing surroundings. This concept closely aligns with the Resource-Based View theory, considering the information provided by vigilance as vital resources contributing to improved institutional performance. The more accurate and reliable the information received by the organization, the better its ability to utilize resources effectively, enhancing its competitiveness in the market.

Sowaid and Zaghdhi (2018) illustrate that an effective vigilance system leads to profitability and positive relationships. This highlights the importance of strategic physiognomy as a link that enhances strategic vigilance by transforming information into practical strategies, improving institutional performance through better relationships and market performance.

Hamouda and Bouaziz (2022) consider strategic vigilance an informational activity that supports creativity by anticipating risks and offering solutions. This demonstrates how strategic vigilance enhances strategic physiognomy by supporting creativity and innovation. This aligns with Organizational Learning Theory, where knowledge acquisition and dissemination contribute to improved organizational creativity and innovation.

Alout and Alsayed (2018) provide a model for linking strategic vigilance and strategic physiognomy within the context of Path-Goal Theory. Their study emphasizes strategic vigilance as a tool empowering individuals and teams to make informed decisions. This aligns with Path-Goal Theory's focus on leadership guiding individuals toward goal achievement. Strategic vigilance enhances strategic physiognomy by enabling employees to analyze situations, anticipate changes, and evaluate options. This underscores the importance of leadership support and guidance.

2.3 The Relationship Between Strategic Physiognomy and Institutional Performance

Several studies demonstrate the impact of strategic physiognomy on institutional performance. Abdullah (2024) indicates that strategic physiognomy enhances performance by improving decision-making and resource management.

This reflects the importance of understanding resource utilization for achieving institutional goals. Through the RBV lens, physiognomy enables institutions to identify opportunities and challenges, improving resource allocation efficiency.

Awarib and Tahash (2022) show that empowerment, a dimension of strategic physiognomy, enhances institutional performance. This aligns with Core Competencies theory, which emphasizes collective knowledge and goal-oriented efforts, and Path-Goal theory, which highlights leadership's role in promoting performance. Strategic physiognomy

fosters a work environment that encourages innovation and collaboration, directly contributing to institutional performance.

Bin Kamash (2021) emphasizes the reciprocal relationship between empowerment and performance, demonstrating how empowerment supports innovation and cooperation. Empowerment allows leaders to utilize human resources more effectively, enhancing institutional performance and reflecting the Dynamic Capabilities theory's focus on knowledge as a strategic resource.

Shaheed et al. (2023) support this by emphasizing the role of strategic physiognomy (empowerment, inspiration, and deep understanding) in promoting exceptional performance within organizations. Their results indicate that empowerment enhances employee decision-making, while inspiration increases innovation and individual performance, aligning with Organizational Learning theory that highlights the importance of acquiring and distributing knowledge.

Ghanem and Al-Marhazi (2024) clarify that inspirational motivation, influenced by transformational leadership, affects outstanding performance, reflecting Path-Goal theory's emphasis on leadership's role in creating a supportive work environment. Inspirational motivation emerges as a vital factor that enables employees to achieve high performance, thereby supporting the positive results of the overall performance of institution.

The interrelationships among strategic vigilance, strategic physiognomy, and institutional performance are evident in the literature. Theories highlight the importance of learning, information, and knowledge as strategic resources, and emphasize the roles of leaders and employees in improving institutional performance. This study's cognitive model aims to explore how these strategic elements interact to enhance performance and effectiveness.

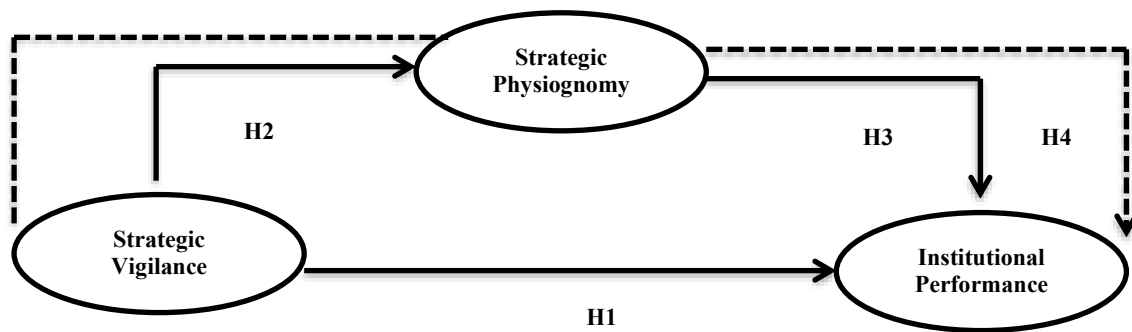
2.4 The Study's Conceptual Model

The conceptual model provides the framework integrating relevant administrative theories with the study's variables. The aforementioned theories offer a foundation of strategic and administrative understanding that supports performance improvement. The Resource-Based View (RBV) clarifies how knowledge gained from strategic vigilance and strategic physiognomy can be invested to enhance institutional resources and competencies. This investment is crucial for achieving competitive advantage, highlighting the importance of knowledge investment within the model.

Path-Goal theory emphasizes the vital role of leaders in guiding employees toward institutional goals. The conceptual model explains how leaders can strategically utilize knowledge to guide decisions and promote innovation and effectiveness. Effective leadership translates knowledge into practical actions. Organizational learning is a dynamic process where strategic vigilance and strategic physiognomy interact, transforming information into applicable knowledge. Integrating organizational learning theory into the conceptual model demonstrates how strategic vigilance is influenced by organizational learning processes. Strategic physiognomy enhances the institution's ability to translate vigilance into effective strategies.

Through this framework, the conceptual model appears as a link between theories and variables, where strategic vigilance embodies the ability to collect accurate information and monitor the trends surrounding the organizational environment. In contrast, strategic physiognomy interprets this information and analyzes the current situation, which enables investment institutions in the Yemeni agricultural sector to make informed decisions that contribute to achieving distinguished institutional performance.

Figure 1. The Study's Conceptual Model



2.5 Hypotheses

Based on the study's problem, questions, and objectives as well as the administrative theories and literature related to the variables, the study's hypotheses were formulated to guide the research. These hypotheses enhance the understanding of the relationship among variables and provide a scientific basis for verifying the results, which contributes to enriching academic knowledge in this field.

1. Strategic vigilance has a statistically significant effect on the institutional performance of investment institutions in the Yemeni agricultural sector ($\alpha \geq 0.05$).
2. Strategic vigilance has a statistically significant effect on the strategic physiognomy of investment institutions in the Yemeni agricultural sector ($\alpha \geq 0.05$).
3. Strategic physiognomy has a statistically significant effect on the institutional performance of investment institutions in the Yemeni agricultural sector ($\alpha \geq 0.05$).
4. Strategic vigilance has a statistically significant effect on institutional performance through strategic physiognomy as a mediating variable for investment institutions in the Yemeni agricultural sector ($\alpha \geq 0.05$).

3 ETHODOLOGY

3.1 Study Design

This study employs a quantitative research design, utilizing a survey approach to explore the relationships among strategic vigilance, strategic physiognomy, and institutional performance. This design is appropriate for testing

hypotheses and identifying causal paths among variables. A cross-sectional methodology is adopted, wherein data is collected at a single point in time from investment institutions within the Yemeni agricultural sector.

3.2 Sampling Methods and Data Collection

The target population for this study comprises employees in senior, middle, and specialized positions within investment institutions operating in the Yemeni agricultural sector. A structured questionnaire was distributed to 214 respondents using a stratified sampling method. A total of 184 valid responses were

received, resulting in a response rate of 86.15%. Data collection was conducted using a combination of online surveys and personal distribution to ensure diverse coverage of organizational contexts.

Table 1: Population and Sample of the Study

Entity	Study Community	Distributed Study Sample	Retrieved	Valid	Used Percentage
General Corporation for Grain Development and Production	115	63	63	63	34.2%
General Corporation for Improved Seed Production	157	76	50	50	27.2%
General Corporation for Agricultural Services	56	27	27	25	13.6%
General Company for Potato Seed Production	100	48	48	46	25.0%
Total	428	214	188	184	100%

3.3 Employed Instruments and Measurements

This study employed a structured questionnaire incorporating validated scales to measure the core concepts. Strategic vigilance was assessed using items related to technological, competitive, commercial, and environmental vigilance. Strategic physiognomy was measured through the dimensions of empowerment, inspiration, and deep understanding. Institutional performance was evaluated across the perspectives of financial, customer, internal processes, learning and growth, and social responsibility. All items were measured on a seven-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). The reliability and validity of the measures were confirmed through Cronbach's alpha analysis and factor analysis, ensuring robustness in measuring the concepts. The content and face validity of the questionnaire were also confirmed by a panel of academic and administrative experts.

3.4 Scale Reliability

Table 2: Measuring the stability of the study variables' dimensions.

Construct	Subconstruct	Cronbach's Alpha
Strategic Vigilance	Technological Vigilance	0.873
	Competitive Vigilance	0.912
	Commercial Vigilance	0.915
	Environmental Vigilance	0.882
Institutional Performance	Financial perspective	0.855
	Learning & Growth Perspective	0.855
	Customers' perspective	0.903
	Internal operations perspective	0.906
	Social responsibility perspective	0.875
Strategic Physiognomy	Empowerment	0.924
	Inspiration	0.936
	Deep Understanding	0.914

As shown in Table 2, the scale reliability, measured using Cronbach's Alpha, indicates strong internal consistency across all variables and sub-variables. For the strategic vigilance, the sub-variables demonstrate high reliability, with competitive vigilance ($\alpha = 0.912$) and commercial vigilance ($\alpha = 0.915$) showing the highest values, followed by environmental vigilance ($\alpha = 0.882$) and technological vigilance ($\alpha = 0.873$). Regarding the institutional performance, all sub-variables are reliable, with the customer perspective ($\alpha = 0.903$) being the highest, followed by the internal processes perspective ($\alpha = 0.906$), the financial perspective ($\alpha = 0.855$), the learning and growth perspective ($\alpha = 0.855$), and the social responsibility perspective ($\alpha = 0.875$). For the strategic physiognomy, inspiration ($\alpha = 0.936$) has the highest reliability, followed by empowerment ($\alpha = 0.924$) and deep understanding ($\alpha = 0.914$). These high Cronbach's Alpha values demonstrate excellent reliability across all measures used in the study.

3.5 Statistical Techniques and Tools

Data analysis employed several statistical techniques to address the research objectives. Descriptive statistics, including means, standard deviations, and the relative importance index, summarized the demographic characteristics of participants and key variables. The internal consistency of measurement

scales was confirmed through reliability analysis using Cronbach's alpha. Correlation analysis explored the strength and direction of relationships among strategic vigilance, strategic physiognomy, and institutional performance. Hypotheses were tested using path analysis with the Preacher & Hayes (2008) Macro Process, which allows for the assessment of both direct and indirect effects.

3.6 Common Method Variance (CMV)

To mitigate potential common method variance (CMV), which can arise when data for independent and dependent variables are collected using the same method, both procedural and statistical remedies were implemented (Landis, 2015). Procedural controls included ensuring participant confidentiality and anonymity to minimize social desirability bias. The questionnaire was meticulously designed with clear instructions and concise wording, and the order of items measuring independent and dependent variables was randomized to prevent respondent cueing. Statistically, Harman's single-factor test was performed. The results indicated that no single factor accounted for a majority of the variance, suggesting that CMV was not a substantial concern.

4 RESULTS:

4.1 Sample Characteristics

Table 3: Characteristics of the study sample

		N	%
Gender	Female	22	12.0%
	Male	162	88.0%
Age	Less than 30 years	34	18.5%
	30-40 years	76	41.3%
	41-50 years	54	29.3%
	More than 50 years	20	10.9%
Education	Bachelor's	125	67.9%
	Diploma or less	45	24.5%
	PhD	4	2.2%
	Master's	10	5.4%
Tenure	Less than 5 years	49	26.6%
	6-10 years	62	33.7%
	11-15 years	23	12.5%
	16 years or more	50	27.2%

Table 3 presents the demographic characteristics of the respondents. Regarding gender, the majority were male (88.0%), while females constituted only 12.0% of the sample. In terms of age, the largest group of participants fell within the 30–40-year category (41.3%), followed by the 41–50-year age group (29.3%), those under 30 years old (18.5%), and those over 50 years old (10.9%). Regarding education, the majority held a bachelor's degree (67.9%), while smaller percentages held a master's degree (5.4%) or a doctorate (2.2%). The "diploma or less" category comprised 24.5%. Concerning job tenure, the largest group had experience ranging from 6-10 years (33.7%), followed by those with less than 5 years (26.6%), 16 years or more (27.2%), and 11-15 years (12.5%). These characteristics reflect a predominantly male, well-educated, and experienced sample, with a balanced distribution across age groups.

4.2 Descriptive Statistics

4.2.1 Strategic Vigilance

Table 4: Mean, Standard Deviation, and Relative Importance of Strategic Vigilance Dimensions

	Mean	SD	RII
Technological Vigilance	5.281	1.046	75.4%
Competitive Vigilance	5.384	1.123	76.9%
Commercial Vigilance	5.441	1.190	77.7%
Environmental Vigilance	5.468	1.010	78.1%

Strategic Vigilance	5.393	0.970	77.0%
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Note: SD = Standard Deviation; RII = Relative Importance Index)

As shown in Table 4, the descriptive statistics for the dimensions of strategic vigilance highlight varying levels of focus and agreement among respondents. Environmental vigilance recorded the highest mean (5.468), indicating it as the most important dimension, with a low standard deviation (1.010), reflecting strong consensus. Similarly, commercial vigilance scored highly mean (5.441) but showed the greatest variation (SD = 1.190), suggesting differing opinions on its importance. Competitive vigilance (Mean = 5.384, SD = 1.123) and technological vigilance (Mean = 5.281, SD = 1.046) were slightly less important, with moderate agreement among participants. Overall, strategic vigilance recorded a mean of 5.393, with a standard deviation of 0.970, indicating consistent agreement and strong emphasis on strategic vigilance across all dimensions.

4.2.2 Strategic Physiognomy

Table 5: Mean, Standard Deviation, and Relative Importance of Strategic Physiognomy Dimensions

	Mean	SD	RII
Empowerment	5.274	1.126	75.3%
Inspiration	4.963	1.350	70.9%
Deep Understanding	5.296	1.069	75.7%
Strategic Physiognomy	5.178	1.086	74.0%

(Note: SD = Standard Deviation; RII = Relative Importance Index)

As shown in Table 5, the descriptive statistics for strategic physiognomy and its dimensions provide insights into the levels of focus and alignment among respondents. Deep understanding emerged as the most emphasized dimension, recording the highest mean (5.296) and a low standard deviation (1.069), indicating a strong and consistent focus on this aspect. This was followed by empowerment with a mean of 5.274 and a slightly higher standard deviation (1.126), reflecting moderate consensus among participants. However, inspiration had the lowest mean (4.963), suggesting it was less important compared to the other dimensions, and showed the highest variation (SD = 1.350), indicating diverse opinions among respondents. Overall, strategic physiognomy recorded a mean of 5.178 with a standard deviation of 1.086, demonstrating moderate focus and consistent alignment across the dimensions.

4.2.3 Institutional Performance

Table 6: Mean, Standard Deviation, and Relative Importance of Institutional Performance Dimensions

	Mean	SD	RII
Financial perspective	5.065	1.196	72.4%
Learning & Growth Perspective	5.026	1.154	71.8%
Customers' perspective	5.274	1.166	75.3%
Internal operations perspective	5.028	1.180	71.8%
Social responsibility perspective	4.713	1.313	67.3%
Institutional performance	5.021	1.033	71.7%

(Note: SD = Standard Deviation; RII = Relative Importance Index)

As shown in Table 6, the descriptive statistics for institutional performance and its dimensions reveal notable variations in focus and alignment among respondents. The customer perspective recorded the highest mean (5.274) with a moderate standard deviation (1.166), indicating a strong focus and consistent agreement on its importance. This was followed by the financial perspective with a mean of 5.065 and a slightly higher standard deviation of 1.196, suggesting it is also of significant value, but with some variation in responses. Both the internal processes perspective (Mean = 5.028, SD = 1.180) and the learning and growth perspective (Mean = 5.026, SD = 1.154) showed moderate focus and agreement. In contrast, the social responsibility perspective had the lowest mean (4.713) and the highest variation (SD = 1.313), suggesting it is less important and opinions about it are more diverse. Overall, institutional performance achieved a mean of 5.021 with a standard deviation of 1.033, reflecting a moderate level of focus across all dimensions and consistent agreement.

4.3 Correlation Analysis

Table 7: Correlation Analysis Between Study Variables

Correlations

	Strategic Vigilance	Strategic Physiognomy	Institutional performance
Strategic Vigilance	1		
Strategic Physiognomy	.790**	1	
Institutional performance	.732**	.806**	1

** . Correlation is significant at the 0.01 level (2-tailed).

As shown in Table 7, strategic vigilance shows a strong correlation with strategic physiognomy ($r = 0.790$, $p < 0.001$), indicating that increased vigilance is closely associated with improved strategic physiognomy. Similarly, strategic vigilance is significantly correlated with institutional performance ($r = 0.732$, $p < 0.001$), suggesting its direct contribution to performance enhancement. Notably, strategic physiognomy exhibits the strongest correlation with institutional performance ($r = 0.806$, $p < 0.001$), highlighting its pivotal role in driving organizational success and supporting its mediating influence between vigilance and performance.

4.4 Hypothesis Testing

Table 8: Results of Hypothesis Testing

Hypothesis	path		B	SE	T	p
H1	c	Strategic Vigilance -> Institutional Performance	0.780	0.054	14.461	0.000
H2	a	Strategic Vigilance -> Strategic Physiognomy	0.885	0.060	14.827	0.000
H3	b	Strategic Physiognomy -> Institutional Performance	0.577	0.071	8.142	0.000
H4	a*b	Strategic Vigilance -> Strategic Physiognomy -> Institutional Performance	0.510	0.080	6.411	0.000

As shown in Table 8, the hypothesis testing results provide strong support for all the relationships proposed in the study, as follows:

Hypothesis One (H1)

The result of the first hypothesis (H1) indicates a significant positive relationship between strategic vigilance and institutional performance, as it obtained a B value of 0.780 with a statistical significance of $p < 0.001$. This means that increasing strategic vigilance leads to improved institutional performance. This can be interpreted as organizations that are more prepared and responsive to changes in their environment are better at achieving their goals and increasing their efficiency.

Looking at the studies that addressed this topic, we find strong support for this hypothesis. The study by Al-Zafiri and Al-Ashwal (2024) showed that there is a significant effect of strategic vigilance with its various dimensions on organizational excellence. This clearly indicates that organizations that adopt effective strategic vigilance have a greater ability to excel in institutional performance.

Also, the study of Abu Aziz et al. (2022) highlighted the significant impact of strategic vigilance in entrepreneurial orientation, reflecting its pivotal role in driving organizations towards innovation and excellence. In the same context, the study of Amer (2018) is also consistent with these results by focusing on the relationship between the dimensions of strategic vigilance and strategic decision-making, reflecting how strategic vigilance can contribute to improving institutional performance by enhancing informed and effective decisions. The study by Mohamadein (2021) also confirmed this positive impact in improving health services, highlighting the importance of strategic vigilance in enhancing institutional performance in vital areas.

Hypothesis Two (H2)

Hypothesis two (H2) examined the relationship between strategic vigilance and strategic physiognomy, and the results showed a significant positive effect ($B = 0.885$, $p < 0.001$). This indicates that organizations with high strategic vigilance tend to improve their ability to understand and analyze market situations and challenges. Therefore, strategic vigilance enhances strategic physiognomy, enabling institutions to make informed decisions.

Despite the scarcity of studies that have addressed strategic vigilance and strategic physiognomy, these results are consistent with a number of studies that highlight the importance of the relationship between strategic vigilance and strategic physiognomy through the analysis of distant signals for both vigilance and foresight. For example, the study conducted by Chaouche and Louabdia (2017) confirmed that strategic vigilance promotes effective communication

between the institution and its external environment. This communication is a vital element for understanding changes in the market, which enhances strategic physiognomy and gives institutions the ability to move quickly and effectively.

The study by Sridi and Boujemaa (2019) supports this hypothesis by clarifying that strategic vigilance enhances creative thinking and the ability to adapt, which strengthens strategic physiognomy.

Likewise, Allout and Al-Sayed (2018) indicated that strategic vigilance enables individuals to make informed decisions in dynamic environments. This idea reflects how strategic vigilance affects the internal processes of the institution, as the accurate analysis of information and data makes the decision-making process more effective, which supports strategic physiognomy and increases the institution's ability to adapt to challenges.

In addition, the study by Hamouda and Bouaziz (2022) indicates that strategic vigilance supports creativity by providing new and innovative solutions. This is consistent with the second hypothesis, as creative thinking is an essential part of strategic physiognomy, which enhances the ability to innovate and respond to changes in the market.

Hypothesis Three (H3)

In Hypothesis Three (H3), the effect of strategic physiognomy on institutional performance was tested, and the results showed a significant positive relationship ($B = 0.577$, $p < 0.001$). This result indicates that strategic physiognomy plays a major role in improving institutional performance. In other words, the greater the institution's ability to analyze and understand its surrounding environment, the better its institutional performance.

These results are consistent with a range of previous studies that highlight the importance of strategic physiognomy for improving performance. The study by Awarib and Tahash (2022) indicated that empowerment, which in this study is one of the dimensions of strategic physiognomy, enhances institutional performance. This is in line with the results of the third hypothesis, as strategic physiognomy enhances the ability of individuals to understand the surrounding environment, leading to improved performance. In a similar context, Bin Kamash (2021) reinforces the idea that increasing the level of empowerment leads to improved performance, showing the strong link between strategic physiognomy and institutional performance.

Also, the study by Ghanem and Al-Marhazi (2024) shows that inspirational motivation, which is the second dimension of strategic physiognomy in this study, positively affects outstanding performance. This is consistent with the third hypothesis, as strategic physiognomy contributes to improving institutional performance by enhancing motivation and inspiration.

The study by Shaheed et al. (2023) reinforces this concept, as it indicates that strategic physiognomy enhances exceptional performance through empowerment, inspiration, and a deep understanding of the environment. These results support this hypothesis that strategic physiognomy plays an important role in improving institutional performance.

Also, the study by Fadhil et al. (2024) confirmed that strategic physiognomy positively and significantly affects institutional performance, which reinforces the importance of physiognomy as a strategic tool to improve performance, especially in marketing contexts.

A number of other studies agree with these results, such as the study by Ali et al. (2023), which confirmed the direct impact of strategic physiognomy in enhancing organizational excellence, and the study by Al-Duhawi and Al-Fatlawi (2023), which found that strategic physiognomy plays a role in improving the organization's reputation, which is positively reflected in performance. The study by Soluman & Jamal (2023) also indicates that strategic physiognomy contributes to the success of tourism organizations, reflecting its positive impact on institutional performance in various sectors.

Other studies also show, such as the study by Al-Sabouni and Al-Hamdani (2023) and the study by Al-Kahrabji et al. (2022), a significant correlation and impact between strategic physiognomy and various dimensions of institutional performance, reflecting the importance of physiognomy in improving the quality of services and the overall performance of organizations.

Hypothesis Four (H4)

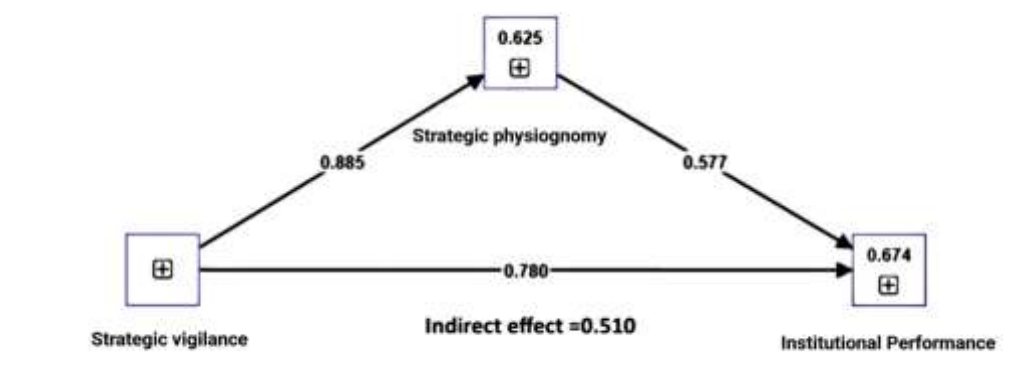
Hypothesis four (H4) examined whether strategic physiognomy acts as a mediator in the relationship between strategic vigilance and institutional performance. The results showed a significant mediation effect ($B = 0.510$, $p < 0.001$), which means that strategic physiognomy is not only a result of strategic vigilance but also plays an important role in enhancing institutional performance. This suggests that strategic vigilance affects strategic physiognomy, which in turn affects institutional performance, highlighting the importance of strategic physiognomy as a partial mediator in this relationship.

The results of the previous hypotheses support this connection, as the second hypothesis (H2) showed the impact of strategic vigilance on strategic physiognomy, reflecting the ability of institutions to understand challenges and adapt to changes. The third hypothesis (H3) also emphasized the impact of strategic physiognomy on institutional performance, indicating that increasing the institution's ability to analyze and understand contributes to improving performance.

Furthermore, studies such as the study by Dawood & Abbas (2018) show that strategic vigilance improves institutional performance by improving information provision and building a marketing culture, which enhances the value of strategic physiognomy in improving performance. The study by Bulbul and Dabbah (2022) confirmed the role of strategic vigilance in improving institutional performance by providing the necessary information to understand the competitive environment, reflecting how a deep understanding of the environment resulting from vigilance enhances strategic physiognomy. Bou Aql (2019) pointed to the importance of strategic vigilance in institutions adapting to external challenges and transformations, reflecting how strategic physiognomy can use that knowledge to improve performance.

In general, the results indicate that strategic vigilance and strategic physiognomy have significant positive effects on institutional performance. Strategic physiognomy is also an effective means that enhances the impact of strategic vigilance on performance. These results confirm the importance of institutions investing in strengthening their strategic vigilance and their ability to understand and analyze to improve their performance.

Figure 2: Unified Path Model



5 DISCUSSION

5.1 Interpretation of Results

- Highlighting the findings of this research reflects the importance of strategic vigilance as a pivotal factor in enhancing institutional performance by improving strategic physiognomy. The reliability of the measurements was assessed using Cronbach's alpha, with high values indicating strong internal consistency across all studied dimensions, reflecting the credibility of the results of this study.
- Demographic data show that the sample consists mainly of males with advanced educational degrees, which may affect perceptions and concepts related to strategic vigilance and institutional performance. This demographic composition suggests the need to understand how these factors can affect the responses and views of the participants.
- When analyzing strategic vigilance, it was found that environmental and commercial vigilance receive the highest levels of focus, reflecting the importance of these dimensions in the contemporary institutional context. Similarly, deep understanding, as one of the dimensions of strategic physiognomy, shows the highest degrees of emphasis, highlighting the need for leaders to be aware of the challenges of the work environment and how to deal with them effectively.
- The results of the correlation analysis indicate the existence of strong and positive relationships among strategic vigilance, strategic physiognomy, and institutional performance. The relationship between strategic vigilance and strategic physiognomy was strong ($r = 0.790$), indicating that enhancing strategic vigilance directly leads to improved strategic physiognomy. Strategic physiognomy also showed a strong positive correlation with institutional performance ($r = 0.806$), indicating its vital role in driving organizational success.
- When testing the hypotheses, positive and significant effects were found across all proposed paths, confirming that strategic vigilance enhances institutional performance directly and indirectly by improving strategic physiognomy. This finding reflects the importance of institutions investing in the development of vigilance strategies to ensure their effective response to changing challenges.

5.2 Theoretical and Practical Implications

5.2.1 Theoretical Implications

- The results highlight the importance of strategic vigilance as an effective tool for improving institutional performance. While previous studies indicate a relationship between vigilance and performance, these results reinforce the theoretical understanding of how the different dimensions of vigilance (technological, competitive, commercial, and environmental) affect performance. This

understanding helps in developing new theoretical models that explain the dynamics of the relationship between these variables.

- The data show that strategic physiognomy plays a mediating role in the relationship between strategic vigilance and institutional performance. This opens the door to a deeper understanding of how institutions can leverage this physiognomy to improve their response to environmental changes. Therefore, these results can support future research that explores how strategic physiognomy can be enhanced to be an enabling factor in improving performance.

The high values of Cronbach's alpha used in the study reflect the importance of using reliable measurement tools. This indicates the need to pay attention to the design of questionnaires and research tools to ensure strong internal consistency, which enhances the credibility of the results and gives a boost to future research to focus on the accuracy of measurements.

5.2.2 Practical Implications

- Investment institutions in the Yemeni agricultural sector should invest in specialized training programs to enhance strategic vigilance among employees. This will help improve individuals' ability to identify changing opportunities and challenges in the market.

- It is essential that institutions adopt strategic physiognomy as a central tool in decision-making processes, and leaders should promote a culture of strategic thinking by encouraging group discussions and exchanging ideas on how to understand the surrounding environment. This will enable institutions to make decisions based on accurate data. Institutions are advised to allocate sufficient resources to research and development, which enables them to innovate and develop new products or improve current processes to meet future challenges.

- Institutions in the Yemeni agricultural sector should foster an organizational culture that encourages innovation and continuous learning, while maintaining flexibility in reviewing strategies to respond to changes in the external environment.

5.3 Limitations of the Study

This study has several limitations. The cross-sectional design limits the ability to infer causality, and self-reported measures may introduce biases despite efforts to minimize them. The focus on investment institutions in the Yemeni agricultural sector also limits the generalizability of the results to other industries or regions. In addition, the study did not consider other potential mediators or moderators, such as organizational culture or environmental uncertainty, which future research can explore.

5.4 Suggestions for Future Research

Future research could use a longitudinal design to determine causality and explore different sectors and regions for broader generalizability. Investigating additional mediators (e.g., organizational culture) would provide deeper insights. Studies can also examine the impact of digital transformation on strategic vigilance and physiognomy in enhancing institutional performance.

6 CONCLUSION

This study contributes valuable insights for managers and decision-makers in institutions seeking to improve their performance in dynamic work environments, as the results show that strategic vigilance and strategic physiognomy are vital elements in institutional strategies. The link between these two elements reflects the possibility of achieving institutional success that effectively responds to environmental changes. The study also provides a rich theoretical framework for understanding the relationships between these variables and opens new avenues for research and practical application in the fields of strategic management. By focusing on strengthening these concepts, institutions can improve their competitiveness and achieve outstanding institutional performance in dynamic work environments.

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