

## Explore the Effect of Strategy Contents on Firm's Innovation Performance: Modeling Using PLS-SEM Approach

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(Received: November 08, 2023 – Accepted for publication: February 21, 2024)

**Abstract:** This study explores the impact of strategic performance measures on the connection between organizational content types and innovation performance. Utilizing survey responses from 216 Saudi Arabian companies, structural equation modeling was applied. Findings reveal that a proactive strategy negatively affects process innovation but positively influences product innovation, while a defensive strategy shows a similar pattern. Conversely, a reactive strategy positively impacts both process and product innovation. Embracing proactive, defensive, or reactive approaches positively influences efficiency and effectiveness. However, efficiency negatively impacts innovation, while effectiveness has a positive effect. The study suggests that adopting diverse strategy content types provides a competitive edge, reflected in strategic performance measures. It acknowledges potential benefits and challenges, contributing empirical evidence to the understanding of the relationships between strategy content, performance metrics, and innovation in Saudi Arabian companies.

**Keywords:** strategy content, innovation performance, strategic performance measure, efficiency, effectiveness.

### استكشاف تأثير محتويات الإستراتيجية على الأداء الابتكاري للشركة: باستخدام نمذجة PLS-SEM

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(قُدِّم للنشر 1445/04/24 هـ - وقُبِّل 1445/08/11 هـ)

**المستخلص:** تستكشف هذه الدراسة تأثير مقاييس الأداء الإستراتيجية على العلاقة بين أنواع المحتوى التنظيمي والأداء الابتكاري. ووفقاً لبيانات الاستطلاع والتي جمعها من خلال 216 شركة سعودية، والتي تم تحليلها باستخدام نمذجة المعادلات الهيكلية. تؤكد نتائج هذه الدراسة أن الإستراتيجية الاستباقية للشركات تؤثر سلباً على ابتكار العمليات، ولكنها تؤثر بشكل إيجابي على ابتكار المنتج، بينما تظهر الإستراتيجية الدفاعية نمطاً مشابهاً. وعلى العكس من ذلك، تؤثر الإستراتيجية التفاعلية بشكل إيجابي على كل من العملية وابتكار المنتج. إن تبني الأساليب الاستباقية أو الدفاعية أو التفاعلية يؤثر بشكل إيجابي على الكفاءة والفعالية. ومع ذلك، فإن الكفاءة تؤثر سلباً على الابتكار، في حين أن الفعالية لها تأثير إيجابي. وتشير هذه الدراسة إلى أن اعتماد محتوى إستراتيجية متنوع في الشركات يكسبها ميزة تنافسية، تنعكس في مقاييس أدائها الإستراتيجية. في الختام تساهم هذه الدراسة بالأدلة التجريبية لفهم العلاقات بين محتوى الإستراتيجية، ومقاييس الأداء، والابتكار في الشركات السعودية.

**الكلمات المفتاحية:** محتوى الإستراتيجية، أداء الابتكار، قياس الأداء الإستراتيجي، الكفاءة، فعالية.

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## INTRODUCTION

The literature on strategic decision-making indicates a research gap in the relationship between strategy contents and innovation performance in organisations, and the role of strategic performance measures in mediating this relationship (Yang et al., 2021). Some empirical studies have suggested that strategy contents can positively affect innovation performance (Wang et al., 2020), but this relationship may be complex and contingent on various factors (Leone et al., 2018). However, the existing studies have not provided conclusive results on this topic. Therefore, this study aims to explore the link between strategy contents and innovation performance in organisations, and to examine how strategic performance measures of efficiency and effectiveness influence this link. This study also investigates the impact of strategic performance measures on strategic decision-making. Previous research has emphasised the importance of strategic performance measures in translating strategy into measurable objectives, which can facilitate strategy implementation and improve organisational performance (Fuertes et al., 2020). Although some studies have analysed the role of strategic performance measures in strategic decision-making and their effect on organisational performance (Stoelhorst et al., 2018; Xu et al., 2019), there is limited empirical and theoretical evidence on the joint relationship between strategic performance measures and innovation performance (Perego & Marx, 2019). Therefore, this study aims to investigate how strategic performance measures of efficiency and effectiveness mediate the relationship between strategy contents and innovation performance.

Strategic performance measure is a multidimensional concept that involves measuring both the efficiency and effectiveness of an organisation (Huang, 2018). Efficiency refers to achieving short-term results with minimal resources, while ef-

fectiveness refers to attaining long-term organisational objectives (Ojha et al., 2020). Some examples of efficiency measures are cost reduction, productivity, and profitability, while some examples of effectiveness measures are customer satisfaction, market share, and growth rate. These measures can help organisations evaluate their performance and identify areas for improvement.

Strategy content refers to the type of strategy that an organisation adopts to compete in the market. Miles and Snow (1978) proposed a typology of four strategy content types: prospector, defender, analyzer, and reactor. Prospectors are organisations that seek to innovate and pursue new opportunities in the market. They have a high innovation orientation, risk-taking propensity, and strategic adaptation capability. Defenders are organisations that focus on improving the efficiency of their existing operations instead of competing on new products or markets. They have a low innovation orientation, risk-taking propensity, and strategic adaptation capability. Analyzers are organisations that combine elements of both prospectors and defenders. They have a moderate innovation orientation, risk-taking propensity, and strategic adaptation capability. Reactors are organisations that lack a consistent and stable strategy and only adjust when forced to do so by environmental pressures. They have a poor innovation orientation, risk-taking propensity, and strategic adaptation capability. The Miles and Snow typology has been widely adopted as a framework for classifying organisational strategy content (Yanes-Estévez et al., 2018; Liu et al., 2020). It can help managers understand their organisation's strengths and weaknesses and tailor their strategies accordingly.

Innovation performance is the evaluation of an organisation's knowledge application and technological innovation activities, including both product innovation and process innovation (Naveed et al., 2022).

Product innovation entails the development of new or improved goods or services that address new customer needs, manage product quality, and establish effective marketing strategies (Gupta et al., 2018). Process innovation refers to the adoption of new or improved methods to produce goods and services (Lee and Shin, 2018). Innovation performance can be measured using various indicators, such as the number of patents, new products, or process improvements; the percentage of sales from new products or services; the degree of novelty or originality of innovations; or the impact of innovations on customer satisfaction, market share, or profitability (Chen et al., 2019). Innovation performance is a key factor for organisational success, especially in highly competitive business environments (Liu et al., 2018; Singh et al., 2019; Zouaghi and Nouria, 2019; Lu and Wang, 2020). It can help organisations gain a competitive advantage, enhance their reputation, and achieve their strategic goals. Therefore, this study addresses the following research question: How do strategy content, strategic performance measures, and innovation performance interact and influence each other in the context of Saudi Arabia? By answering this question, this study contributes to the literature on strategy content, strategic performance measures, and innovation performance by examining how different types of strategy content affect the quality and uniqueness of services offered by companies in Saudi Arabia, and how strategic performance measures of efficiency and effectiveness mediate this relationship. This study is organised as follows: Introduction, Literature Review and Hypotheses, Research Methodology, Data Analysis and Results, Discussion and Implications, Conclusion and References.

### **Literature Review and Hypothesis**

This research proposes that strategic performance measures mediate the relationship between an organisation's strategy contents and innovation performance.

Strategy contents refer to the different ways that organisations respond to environmental changes and opportunities, such as being proactive, defensive, or reactive (Miles & Snow, 1978). Innovation performance refers to the extent to which organisations achieve successful outcomes from their innovation activities, such as developing new products or processes (Damanpour & Aravind, 2012). Previous studies have suggested that the strategic content of an organisation, or the type of strategy stance that it adopts, has a positive influence on its innovation performance, as it reflects its ability to adapt to the market and customer needs (Matsuo et al., 2018; Zhang et al., 2021). However, the strategic content of an organisation is not sufficient to ensure its innovation success, as it also depends on how well the organisation implements its strategy and measures its performance (Cronqvist et al., 2018; Jiang et al., 2019). Supporting this notion, AlTaweel and Al-Hawary's 2021 study, conducted in Saudi Arabia, highlighted that the transformations in the business environment and heightened competition have driven organizations to concentrate extensively on enhancing the implementation of their strategies. This endeavor aims to secure sustainable competitive advantages and foster innovation capabilities that resonate with the evolving desires of their customers. Therefore, this research examines the role of strategic performance measures, or the indicators that organisations use to evaluate their performance and guide their actions, as potential mediators between strategy contents and innovation performance.

Organisations that adopt a proactive strategy stance are characterised by their innovativeness and risk-taking in developing their products and services. They aim to create new markets and opportunities by offering novel and differentiated solutions to customer needs. This strategy stance is reflected in their strategic performance measures, which can assist them in implementing their strategy and enhancing their

innovation performance, if they are aligned with their strategic objectives and capabilities. Previous studies have emphasised the importance of strategic performance measures in fostering innovation performance, especially for organisations with a proactive strategy stance (Albeshier, 2014; De Massis et al., 2018; Park & Jang, 2018; Wang et al., 2019). For example, Apple, Starbucks, Netflix, and Patagonia are a well-known example of a proactive organisations.

Apple is a renowned example of a proactive organisation that uses strategic performance measures such as customer satisfaction, market share, and revenue growth to evaluate its performance and guide its actions. Apple is also known for its product innovation, such as the iPhone, the iPad, and the Apple Watch, which have created new markets and customer segments (Lashinsky, 2012). Starbucks is another example of a proactive organisation that has taken a proactive stance on social and environmental issues, such as supporting fair trade, reducing waste, promoting diversity and inclusion, and providing health care and education benefits to its employees (Starbucks Corporation, 2020). Starbucks is also known for its service innovation, such as offering mobile ordering, delivery, and loyalty programs to its customers (Starbucks Corporation, 2020). Netflix is a third example of a proactive organisation that has taken a proactive stance on innovation and customer satisfaction, such as creating original and exclusive content, offering personalised recommendations, expanding its global reach, and adapting to changing consumer preferences (Netflix Inc., 2020). Netflix is also known for its business model innovation, such as using subscription-based streaming services instead of traditional DVD rentals or cable TV (Netflix Inc., 2020). Patagonia is a fourth example of a proactive organisation that has taken a proactive stance on sustainability and activism, such as using organic

and recycled materials, donating to environmental causes, encouraging customers to repair and reuse their products, and supporting social movements (Patagonia Inc., 2020). Patagonia is also known for its social innovation, such as creating a benefit corporation that balances profit with purpose (Patagonia Inc., 2020).

Thus, these examples illustrate how organisations with a proactive strategy stance can achieve higher levels of innovation performance by using strategic performance measures that are aligned with their strategic objectives and capabilities. However, these organisations also face some challenges and opportunities in terms of innovation performance. For instance, these organisations need to balance their innovativeness and risk-taking with their financial viability and customer loyalty. They also need to cope with the uncertainty and complexity of the external environment and the changing customer needs. Moreover, these organisations need to maintain their competitive advantage by constantly innovating their products and services and creating new markets and opportunities. Therefore, these organisations need to design strategic performance measures that can help them monitor their performance and guide their actions in a dynamic and uncertain environment (Anning-Dorson et al., 2018). Some of the common obstacles to innovation that these organisations may encounter include lack of a shared vision, short-term focus, lack of resources, lack of time, lack of innovation culture, lack of senior leadership support, and unrealistic expectations (Salamzadeh & Rezai, 2016). These obstacles can be overcome by creating a clear and compelling innovation vision, setting long-term goals, allocating sufficient resources and time, fostering a culture of innovation, engaging senior leaders in innovation initiatives, and managing expectations and risks (Anning-Dorson et al., 2018).

Organisations that adopt a defender approach in their strategy are characterised

by their conservatism and efficiency in developing their products and services. They focus on improving the efficiency of their existing products and services rather than exploring new products or markets. This approach is reflected in their strategic performance measures, which can assist them in implementing their strategy and enhancing their innovation performance, if they are aligned with their strategic objectives and capabilities. Previous studies have shown the positive impact of strategic performance measures on innovation performance, especially for organisations with a defender strategy (Lee et al., 2018; Wu & Wu, 2020). For example, Toyota, Walmart, Coca-Cola, and McDonald's are a well-known example of a proactive organisations.

Toyota is a well-known example of a defender organisation that uses strategic performance measures such as cost reduction, quality improvement, and operational excellence to evaluate its performance and guide its actions. Toyota is also known for its process innovation, such as the Toyota Production System, which has enabled it to achieve high levels of efficiency and quality in its manufacturing operations (Liker & Hoseus, 2008). Walmart is another example of a defender organisation that uses strategic performance measures such as sales growth, market share, and customer satisfaction to evaluate its performance and guide its actions. Walmart is also known for its operational innovation, such as its supply chain management system, which has enabled it to reduce costs and increase customer convenience (Fishman, 2006). Coca-Cola is a third example of a defender organisation that uses strategic performance measures such as brand awareness, customer loyalty, and profitability to evaluate its performance and guide its actions. Coca-Cola is also known for its product innovation, such as introducing new flavors, packaging, and marketing campaigns to maintain its market leadership (Kotler &

Keller, 2016). McDonald's is a fourth example of a defender organisation that uses strategic performance measures such as revenue growth, customer satisfaction, and employee engagement to evaluate its performance and guide its actions. McDonald's is also known for its service innovation, such as offering online ordering, delivery, and customization options to its customers (McDonald's Corporation, 2020).

Thus, these examples illustrate how organisations with a defender approach can achieve moderate levels of innovation performance by using strategic performance measures that are aligned with their strategic objectives and capabilities. However, these organisations also face some challenges and opportunities in terms of innovation performance. For instance, these organisations need to balance their efficiency and conservatism with their adaptability and responsiveness. They also need to cope with the changing customer needs and preferences, as well as the competitive threats from new entrants or substitutes. Moreover, these organisations need to sustain their competitive advantage by constantly improving their products and services and retaining their customers' loyalty. Therefore, these organisations need to design strategic performance measures that can help them monitor their performance and guide their actions in a stable but dynamic environment (Miles & Snow, 1978).

Organisations that adopt a reactor approach in their strategy are characterised by their passiveness and unpredictability in developing their products and services. They lack a clear and consistent direction and only respond to environmental changes when forced to do so. This approach is evident in their strategic performance measures, which fail to assist them in implementing their strategy and enhancing their innovation performance, if they are not aligned with their strategic objectives and capabilities. Previous studies have shown the negative impact of strategic per-

formance measures on innovation performance, especially for organisations with a reactor strategy (Mol & Birkinshaw, 2019). For example, Kodak, Blockbuster, Nokia, and Sears are well-known examples of reactor organisations that did not use strategic performance measures effectively to evaluate their performance and guide their actions. They also failed to innovate their products and services, such as digital cameras, online streaming, smartphones, and online shopping, which led to their decline and bankruptcy.

Kodak did not use strategic performance measures effectively to evaluate its performance and guide its actions. Kodak also failed to innovate its products and services, such as digital cameras and online photo sharing, which led to its decline and bankruptcy (Lucas & Goh, 2009). Blockbuster is another example of a reactor organisation that failed to adapt to the changing market conditions and customer preferences. Blockbuster did not use strategic performance measures effectively to evaluate its performance and guide its actions. Blockbuster also failed to innovate its products and services, such as online streaming and subscription services, which led to its decline and bankruptcy (Groysberg et al., 2018). Nokia is a third example of a reactor organisation that failed to adapt to the changing market conditions and customer preferences. Nokia did not use strategic performance measures effectively to evaluate its performance and guide its actions. Nokia also failed to innovate its products and services, such as smartphones and applications, which led to its decline and loss of market share (Jia, & Yin, 2015). Sears is a fourth example of a reactor organisation that failed to adapt to the changing market conditions and customer preferences. Sears did not use strategic performance measures effectively to evaluate its performance and guide its actions. Sears also failed to innovate its products and services, such as online shopping and cus-

tomers loyalty programs, which led to its decline and bankruptcy (O'Reilly & Tushman, 2021).

Thus, these examples illustrate how organisations with a reactor approach tend to have lower levels of innovation performance by failing to use strategic performance measures that are aligned with their strategic objectives and capabilities. However, these organisations also have some opportunities to improve their innovation performance by learning from their mistakes and adopting more proactive or adaptive strategies in response to environmental changes (Mol & Birkinshaw, 2019). For instance, these organisations can use strategic performance measures that can help them monitor their performance and guide their actions in an uncertain and complex environment (Anning-Dorson et al., 2018). Some of the common opportunities for innovation that these organisations may encounter include identifying new customer needs, exploring new technologies, collaborating with partners, or creating new business models (Rick, 2014); (Innovation Asset Group, 2019). These opportunities can be exploited by creating a clear and compelling innovation vision, setting long-term goals, allocating sufficient resources and time, fostering a culture of innovation, engaging senior leaders in innovation initiatives, and managing expectations and risks (Anning-Dorson et al., 2018).

Therefore, understanding the unique needs and characteristics of each strategy stance can help organisations design strategic performance measures that better align with their goals, resulting in improved innovation performance. The main focus of this research is to examine the correlation between the contents of strategies in organisations and their innovation performance. Additionally, this study aims to explore the impact of strategic performance measures such as efficiency and effectiveness as me-

diators between strategy contents and innovation performance. Based on this, the following hypotheses have been formulated:

H1: The different strategy contents (prospector, defender, and reactor) have a direct effect on strategic performance measures (efficiency and effectiveness).

H2: Strategic performance measures (efficiency and effectiveness) have a direct effect on innovation performance.

H3: The different strategy contents (prospector, defender, and reactor) have a direct effect on innovation performance.

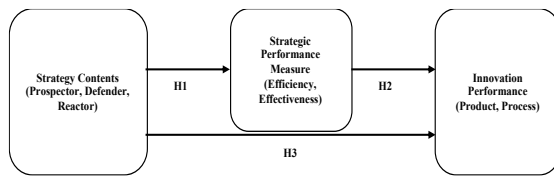


Figure 1: Conceptual Model and Research Hypotheses

## Methods

### Sample and Procedures

This study focused on companies in Saudi Arabia's service or industrial sector. The study targeted the top managers of these companies, who also served as board members and made strategic decisions for their companies (Rosenbusch et al., 2018). Previous studies have indicated that the participation of top managers in research surveys can enhance the validity of the results (Vroom & Jago, 2018; Berrone et al., 2019). Therefore, this study adopted an electronic survey as the data collection method, as it was convenient and efficient for the respondents. The survey was conducted from April to August 2022, and a total of 3500 questionnaires were sent to 1050 firms. The study received 629 responses from 219 firms, with a minimum

of two responses per firm to ensure the representativeness and reliability of the data. The response rate was satisfactory, compared to other studies that have reported lower response rates from top managers (Grewal et al., 2018; Jaskiewicz et al., 2021). The study used Structural Equation Modeling (SEM) as the data analysis technique, as it was suitable for testing the causal relationships among multiple variables in the research framework. The data was analyzed using two software packages: SPSS (Version 28) for descriptive statistics and SmartPLS 4.0 for partial least squares path modeling. This study chose the PLS path modeling over the CBSEM approach that previous studies have used for several reasons. First, PLS path modeling can handle formative constructs more easily than CBSEM. Although CBSEM tools (such as AMOS) can deal with formative constructs in a study model, few studies actually use such a model, suggesting that it is difficult to apply (Hair Jr et al., 2016). Second, PLS path modeling is more suitable for exploratory research (like this one), while CBSEM is better for testing theory (Fornell & Bookstein, 1982). Third, PLS path modeling does not impose restrictive assumptions on the data. For example, PLS path modeling can accommodate reflective and formative constructs, samples smaller than 100, single-item constructs, metric and non-metric data types, datasets with multicollinearity and missing values (Hair & Alamer, 2022). Therefore, PLS path modeling is considered a 'soft-modelling' method.

### Measures

To measure the constructs, the previously tested scales were used.

Table 1: Reliability and Validity Test

Construct	No. of Questions	Cronbach's alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)	DV/IV/Mod*
Prospector (SCP)	4	0.955	0.967	0.880	IV
Defender (SCD)	3	0.920	0.950	0.863	IV
Reactor (SCR)	5	0.974	0.979	0.905	IV

Construct	No. of Questions	Cronbach's alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)	DV/IV/Mod*
Strategic Performance Measure of Efficiency (SPEy)	12	0.983	0.985	0.845	Mod
Strategic Performance Measure of Effectiveness (SPEs)	11	0.975	0.979	0.853	Mod
Product Innovation (PODI)	5	0.925	0.944	0.771	DV
Process Innovation (POCI)	3	0.858	0.913	0.777	DV

\*DV=dependent variable, IV= independent variable, Mod= moderator variable

**Independent variable:** strategy contents (prospector, defender, and reactor). In this study, strategy contents (prospector, defender, reactor) were measured by 12 items scale, taken from Snow and Hrebiniak (1980) and Stevens and McGowan (1983), and scaled on Likert scale (1= Not at all; 7 = Completely). A prospecting strategy was measured by a 4-item scale. The 4 items were: (1) we continually redefine our service priorities; (2) we seek to be first to identify new modes of delivery; (3) searching for new opportunities is a major part of our overall strategy; (4) we often change our focus to new areas of service provision. This 4-item measure displays acceptable levels of reliability ( $\alpha=0.955$ ;  $CR=0.967$ ) and validity ( $AVE=0.880$ ), as shown in supplement Table (1). A defending strategy was measured by a 3-item scale. The 3 items were: (1) we seek to maintain stable service priorities; (2) the service emphasizes efficiency of provision; (3) we focus on our core activities. This 3-item measure displays acceptable levels of reliability ( $\alpha=0.920$ ;  $CR=0.950$ ) and validity ( $AVE=0.863$ ), as shown in supplement Table (1). A reacting strategy was measured by a 5-item scale. The 5 items were: (1) we have no definite service priorities; (2) we change provision only when under pressure from external agencies; (3) we give little attention to new opportunities for service delivery; (4) the service explores new opportunities only when under pressure from external agencies; (5) we have no consistent response to external pressure. This 4-item measure displays acceptable levels

of reliability ( $\alpha=0.983$ ;  $CR=0.985$ ) and validity ( $AVE=0.845$ ), as shown in supplement Table (1).

**Dependent variable:** In this study, innovation performance (product and process) was measured by 9 items scale, taken from Prajogo and Sohal (2003), and scaled on Likert scale (1= Not at all; 7 = Completely). A product innovation was measured by a 5-item scale. The 5 items were: (1) the level of newness (novelty) of new products; (2) the use of latest technological innovations in new product development; (3) the speed of new product development; (4) the number of new products introduced to the market; (5) the number of new products that is first-to-market (early market entrants). This 5 items measure displays acceptable levels of reliability ( $\alpha=0.925$ ;  $CR=0.944$ ) and validity ( $AVE=0.771$ ), as shown in supplement Table (1). A process innovation was measured by a 4-item scale. The 4 items were: (1) the technological competitiveness; (2) the updated-ness or novelty of technology used in processes; (3) the speed of adoption of the latest technological innovations in processes; (4) the rate of change in processes, techniques, and technology. This 4 items measure displays acceptable levels of reliability ( $\alpha=0.858$ ;  $CR=0.913$ ) and validity ( $AVE=0.777$ ), as shown in supplement Table (1).

**Moderator variable:** strategic performance measure (efficiency and effectiveness). In this study, strategic performance measure (efficiency and effectiveness) was measured by 22 items scale, taken from Pollanen et al., (2017), and scaled on Likert



scale (1= Not at all; 7 = Completely). Strategic performance measure of efficiency was measured by a 12 items scale, and also scaled using the same seven-points of Likert scale as above. The items included: (1) to what extent does your organization have performance measures for the Efficient use of allocated budget?; (2) to what extent does your organization have performance measures for the Quantity of products or services provided?; (3) to what extent does your organization have performance measures for the Quality of products or services provided?; (4) to what extent does your organization have performance measures for the Customer satisfaction?; (5) to what extent does your organization have performance measures for the Operating efficiency?; (6) to what extent does your organization have performance measures for the Product/service development or innovation?; (7) how important is Efficient use of allocated budget to the long-term success of your organization?; (8) how important is Quantity of products or services provided to the long-term success of your organization?; (9) how important is Quality of products or services provided to the long-term success of your organization?; (10) how important is Customer satisfaction to the long-term success of your organization?; (11) how important is Operating efficiency to the long-term success of your organization?; (12) how important is Product/service development or innovation to the long-term success of your organization? This 11 items measure

displays acceptable levels of reliability ( $\alpha=0.837$ ;  $CR=0.891$ ) and validity ( $AVE=0.671$ ), as shown in supplement Table (1). Strategic performance measure of effectiveness was measured by an 8 items scale, and also scaled using the same seven-points of Likert scale as above. The items included: (1) to what extent does your organization have performance measures for the employee satisfaction?; (2) to what extent does your organization have performance measures for the employee capabilities?; (3) to what extent does your organization have performance measures for the social responsibilities?; (4) to what extent does your organization have performance measures for the environmental performance?; (5) to what extent does your organization have performance measures for the accountability for results to external parties?; (6) how important is employee satisfaction to the long-term success of your organization?; (7) how important is employee capabilities to the long-term success of your organization?; (8) how important is social responsibilities to the long-term success of your organization?; (9) how important is accountability for results to external parties to the long-term success of your organization? This 9 items measure displays acceptable levels of reliability ( $\alpha=0.975$ ;  $CR=0.979$ ) and validity ( $AVE=0.853$ ), as shown in supplement Table (1).

**Results**

**Table 2: Total Effects**

No	Relationships	Sample	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values	Results
1	SCP → SPEy	0.405	0.406	0.058	6.948	0.000	Supported
2	SCP → SPEs	0.538	0.538	0.058	9.307	0.000	Supported
3	SCD → SPEy	0.288	0.287	0.058	4.979	0.000	Supported
4	SCD → SPEs	0.255	0.254	0.054	4.751	0.000	Supported
5	SCR → SPEy	-0.150	-0.151	0.027	5.533	0.000	Supported
6	SCR → SPEs	-0.056	-0.057	0.025	2.270	0.023	Supported
7	SPEy → POCl	0.011	0.009	0.064	0.168	0.866	Not supported
8	SPEy → PODI	0.005	0.005	0.055	0.084	0.933	Not supported

No	Relationships	Sample	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values	Results
9	SPEs → POCI	0.413	0.414	0.084	4.902	0.000	Supported
10	SPEs → PODI	0.478	0.478	0.067	7.177	0.000	Supported
11	SCP → POCI	0.014	0.014	0.058	0.238	0.812	Not supported
12	SCP → PODI	0.160	0.161	0.049	3.272	0.001	Supported
13	SCD → POCI	0.010	0.008	0.052	0.187	0.851	Not supported
14	SCD → PODI	-0.105	-0.107	0.045	2.351	0.019	Supported
15	SCR → POCI	0.158	0.158	0.038	4.151	0.000	Supported
16	SCR → PODI	0.196	0.195	0.034	5.747	0.000	Supported

\* Significant at  $p < 0.05$ , \*\* Significant at  $p < 0.01$

Table 2 displays the key findings of the survey which indicate a significant relationship between the prospecting strategy and both efficiency and effectiveness measures of strategic performance. Likewise, the study suggests a similar relationship between defending strategy and the same performance measures. Additionally, the results of the survey reveal a strong correlation between reacting strategy and both efficiency and effectiveness measures. Despite these findings, the survey did not show any notable impact of strategic performance measures of efficiency on process innovation, nor was there a significant influence of prospecting or defending strategies on process innovation. In contrast, the study identified a robust relationship between strategic performance measures of effectiveness and both product and process innovation. Furthermore, the survey established a strong association between prospecting strategy and product innovation, as well as between defending strategy and product innovation. Lastly, the survey revealed a strong correlation between reacting strategy and both product and process innovation.

### Discussion and Implications

In this comprehensive exploration, the study intricately probes the relationship between organizational contents and innovation performance, with a focal point on the unique intricacies of the Saudi Arabian context. Drawing from the resource-based

view of strategic management, the research posits that strategically incorporating organizational contents—prospect, defender, and reactor—into strategies confers a substantial competitive advantage. This advantage, anchored in the adept provision of products and services at competitive prices while upholding quality, aligns seamlessly with Saudi Arabia's transformative Vision 2030 initiatives.

The findings resonate with significance, shedding light on how organizations embracing diverse organizational contents positively influence strategic performance measures, particularly efficiency and effectiveness. Delving into the Saudi Arabian landscape, nuanced dynamics surface: prospect and defender contents exhibit a paradoxical impact on innovation, while a reactor stance showcases a positive influence on both process and product innovation. The dichotomy between the adverse effects of efficiency and the positive impacts of effectiveness on innovation adds layers to the nuanced understanding of these intricate relationships within the Saudi socio-economic fabric.

In the domain of strategic management literature, this empirical contribution holds significant weight. The research posits that organizations embracing a prospecting strategy exhibit increased efficiency and effectiveness, aligning with the idea of gaining a competitive edge through adept utilization of internal resources (Barney, 1991). These findings reinforce earlier studies associating prospecting strategy

with crucial organizational performance indicators, resonating with the changing economic landscape and Vision 2030 objectives. Moreover, they support previous research indicating a positive correlation between a prospecting strategy and organizational performance indicators like profitability, growth, innovation, and customer satisfaction (Miles & Snow, 1978; Venkatraman, 1989; Zahra & Covin, 1995).

However, this discovery challenges some studies reporting mixed or negative effects of a prospecting strategy on performance outcomes such as market share, return on assets, and survival (Hambrick, 1983; Miller & Friesen, 1986; Dess & Davis, 1984). The study addresses this gap by employing a comprehensive measure of strategic performance encompassing both efficiency and effectiveness dimensions. This insight carries practical implications for managers, practitioners, policymakers, and other stakeholders who can leverage the study's results. It implies that organizations can enhance their strategic performance by incorporating a prospecting strategy as part of their overall approach. This entails a continued focus on innovation, the development of new business models, active pursuit of entrepreneurial ideas, prioritization of transforming these ideas into innovative products and services, and swift entry into new markets while remaining adaptable to meet customer needs.

These practical implications extend into the heart of Saudi Arabia's dynamic landscape, offering tailored insights for organizations navigating Vision 2030 initiatives. The strategic adoption of prospecting strategies is highlighted as a pathway to elevate performance, emphasizing continuous innovation, the development of new business models, and agile market entry.

On the flip side, organizations that embrace a defending strategy reap benefits through a positive correlation with efficiency and effectiveness, aligning seamlessly with Saudi Arabia's vision for economic stability, quality enhancement, and

customer retention. This customized approach empowers organizations to competently navigate price and quality competition, enhance the efficiency of their current products and services, and yield positive returns in both the short and long term. This discovery aligns with existing literature suggesting that a defending strategy is linked to elevated levels of cost efficiency, quality improvement, customer retention, and profitability (Miles & Snow, 1978; Venkatraman, 1989; Zahra & Covin, 1995).

However, this revelation contradicts certain studies indicating that a defending strategy may correlate with lower levels of innovation, market share, growth, and survival (Hambrick, 1983; Miller & Friesen, 1986; Dess & Davis, 1984). The study resolves this inconsistency by employing a comprehensive measure of strategic performance that encompasses both efficiency and effectiveness dimensions. Additionally, it controls for various contextual factors that may influence the relationship between strategy contents and performance. Consequently, the study findings suggest that integrating a defending strategy into an organization's overall approach can be advantageous for those operating in stable and predictable environments. In such settings, organizations can leverage existing resources and capabilities to maintain or enhance their competitive position. By consistently seeking new ideas to optimize operational efficiency, promptly introducing developed products and services into existing or new markets, and refining existing business models, organizations can attain both efficiency and effectiveness measures of strategic performance, ultimately leading to positive returns on investment.

Another significant revelation from this study with crucial practical implications for organizations lies in the positive correlation between embracing a reacting strategy and measures of strategic performance, specifically efficiency and effectiveness. This implies that responding to external environmental pressures can propel organizations to evolve and enhance their existing products and services, resulting in favorable returns over both the short and long term. This finding holds particular relevance in light of the distinctive challenges posed by unpredictable environments, as seen in Saudi Arabia.

Consistent with existing literature, the study suggests that a reacting strategy stance is linked to elevated levels of adaptability, responsiveness, flexibility, and resilience (Miles & Snow, 1978; Venkatraman, 1989; Zahra & Covin, 1995). However, it also challenges certain studies indicating that a reacting strategy may correlate with lower levels of innovation, differentiation, growth, and survival (Hambrick, 1983; Miller & Friesen, 1986; Dess & Davis, 1984). The study addresses this contradiction by employing a comprehensive measure of strategic performance that encompasses both efficiency and effectiveness dimensions. Moreover, it takes into account various contextual factors that may influence the relationship between strategy contents and performance.

Therefore, the study findings suggest that integrating a reacting strategy into an organization's overall approach can be advantageous, particularly for those operating in turbulent and unpredictable environments. In such settings, organizations can leverage their existing resources and capabilities to effectively cope with changes and challenges. By adeptly responding to external environmental pressures, organizations can enhance the efficiency and effectiveness of their current products and services, ultimately leading to positive returns on investment.

In essence, the affirmative impact of prospecting, defending, and reacting strategies on various performance measures underscores the strategic imperative for organizations to meticulously align strategies with the nature of their business and the unique Saudi Arabian external environment. Continuous improvement and innovation emerge as paramount for maintaining competitiveness.

Looking beyond its theoretical implications, the study emphasizes a positive correlation between the effectiveness of strategic performance measures and innovation performance. In the evolving economic landscape and amidst Saudi Arabia's Vision 2030 initiatives, organizations can enhance their effectiveness by strategically investing in both process and product innovation.

This discovery aligns with previous studies (e.g., Helfat et al., 2020; Osiyevskyy & Dewald, 2020) exploring the connection between innovation performance and strategic performance measures of organizations. Helfat et al. (2020), for instance, found that firms investing in innovation achieved superior long-term performance, with a more pronounced positive effect for those focusing on both product and process innovation. Similarly, Osiyevskyy and Dewald (2020) identified a positive relationship between innovation performance and the financial performance of firms, suggesting that investing in both process and product innovation can enhance effectiveness. These yields benefit such as cost reduction, improved quality, heightened customer satisfaction, differentiation from competitors, market expansion, and the creation of new value propositions.

In contrast to the positive relationship between effectiveness and innovation performance, the study observes a less-documented negative relationship between efficiency and innovation performance. The emphasis on efficiency and cost-cutting may hinder innovation efforts, consistent

with earlier research (Matsuyama, 2018). For instance, Matsuyama (2018) found that firms pursuing cost leadership strategies tended to exhibit lower levels of product innovation compared to those adopting differentiation strategies. Conversely, other studies have identified a positive relationship between efficiency and innovation when firms embrace efficient innovation practices like lean management, open innovation, frugal innovation, and agile development (Kafouros et al., 2018). This suggests that the relationship between efficiency and innovation is complex and context-dependent, necessitating a careful balancing act for optimal performance.

These findings hold significant practical implications for organizations seeking to enhance their strategic performance through investments in both efficiency and innovation. It implies that organizations should adopt a contingency approach, taking into consideration their external environment, internal resources, capabilities, and goals. By doing so, organizations can achieve both efficiency and effectiveness measures of strategic performance, ultimately leading to positive returns on investment. This nuanced analysis serves as a strategic guide, offering a detailed roadmap for organizations navigating the intricacies of Saudi Arabia's economic landscape and contributing significantly to the national vision for economic transformation.

## **Conclusion**

This study explored the relationship between strategy contents (prospecting, defending, and reacting) and strategic performance measures (efficiency and effectiveness), as well as the connection between strategic performance measures and innovation performance. This approach makes the study one of the first to look at these relationships comprehensively. The main research question of the study was to examine how different strategy contents affect

strategic performance measures (efficiency and effectiveness), and how strategic performance measures (efficiency and effectiveness) affect innovation performance, which encompasses both process and product innovation. The findings showed that different strategy contents had different impacts on efficiency and effectiveness, and that efficiency had a positive impact on innovation performance, while effectiveness had a negative impact. This may be explained by the fact that there is often divergence between the strategy contents adopted by organisations, which can influence their efficiency, effectiveness, and innovation performance. The study contributes to the literature on strategy contents, strategic performance, and innovation performance by providing new insights and evidence on these relationships. The study also has practical implications for managers, practitioners, policymakers, or other stakeholders who can benefit from or apply the results of this study. The study suggests that organisations should adopt a contingency approach to strategy contents, depending on their external environment, internal resources, capabilities, and goals. By doing so, organisations can balance their efficiency and effectiveness, and enhance their innovation performance. The study also provides some recommendations on how to implement or use the findings of this study in practice. To expand on these findings, future studies should focus on identifying under what circumstances strategy contents such as prospect and defender can have a positive impact on process innovation. Furthermore, it would be beneficial to examine which strategy contents, whether it be prospect, defender, or reactor, have a greater positive impact on product innovation. It is important to note that the main limitation of this study was the narrow sample, which only included or-

organisations from Saudi Arabia. Thus, caution should be taken in generalizing these findings to other countries in the Middle East or Arab region. Overall, the study's findings highlight the importance of carefully considering the adoption of different

strategy contents in order to improve strategic performance measures and innovation performance.

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