

Internal and External Factors of the Strategic–Organizational Environment and SME Managerial Performance: The Structuring Role of Managerial Innovation

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Abstract

In a context marked by intensified competition, uncertainty, and resource scarcity, understanding the internal and external factors that shape the managerial performance of SMEs has become a central issue. This article examines the role of the strategic–organizational environment (SOE) as a configuration of internal factors (organization, strategy, individuals, and information systems) and external factors (competitive environment) structuring managerial performance, in conjunction with managerial innovation. Based on a survey conducted among 103 SMEs in the Souss-Massa region (Morocco) and structural equation modeling using PLS-SEM, the study highlights, on the one hand, that managerial innovation significantly influences all dimensions of the SOE, and, on the other hand, that this environment itself exerts a strong and systematic impact on the different components of managerial performance (leadership, interpersonal relationships, technical mastery, and collective behaviors). The results show that internal factors related to organization, individuals, and information systems constitute particularly decisive levers, while strategy and the external environment enhance SMEs’ capacity for adjustment and positioning. The article contributes to the literature by proposing an integrated view of the SOE as an interface between managerial innovation and performance, within a contingency and dynamic capabilities perspective, and provides SME managers with operational guidelines to coherently manage internal and external factors that support managerial performance.

Keywords: SMEs; Managerial innovation; Managerial performance; Strategic–organizational environment; Internal and external factors; Dynamic capabilities

Introduction

Small and medium-sized enterprises (SMEs) currently operate in environments characterized by intensified competition, increased market instability, and rapid changes in technologies and stakeholder expectations (Burns & Stalker, 1961; Lawrence & Lorsch, 1967). In such a context, managerial performance can no longer be interpreted solely on the basis of individual managerial attributes or the sophistication of management tools. It increasingly depends on the firm's ability to structure and coordinate a set of internal and external factors that frame managerial action, including internal organization, information systems, human resources, strategic orientation, and the competitive environment (Donaldson, 2001).

The literature in organizational theory and management control highlights that organizational performance results from the alignment between a firm's internal characteristics and the demands of its environment, in line with the contingency perspective (Lawrence & Lorsch, 1967; Donaldson, 2001). In this vein, research on dynamic capabilities emphasizes that high-performing organizations are those able to continuously renew and reconfigure their resources, processes, and practices in response to evolving environments (Teece, Pisano, & Shuen, 1997; Teece, 2007). Managerial innovation is embedded within this dynamic as a mechanism for transforming management practices and organizational modes (Birkinshaw, Hamel, & Mol, 2008). However, in the SME context, these transformation processes are constrained by limited resources, a high degree of centralized decision-making, low levels of formalization, and strong exposure to external shocks (Julien, 1997; Torrès, 1999).

Within this framework, managerial innovation emerges as a key driver of performance, as it enables the renewal of coordination, control, and resource mobilization mechanisms (Damanpour & Aravind, 2012; Mol & Birkinshaw, 2009). Empirical studies suggest that the adoption of innovative managerial practices, new organizational arrangements, or upgraded information systems can significantly enhance overall firm performance, particularly in SMEs (OECD, 2005; Vaccaro et al., 2012). However, the integration of managerial innovation within a broader strategic–organizational environment combining both internal and external factors remains insufficiently explored.

More specifically, two major questions remain. First, how does managerial innovation influence the different components of the strategic–organizational environment of SMEs, namely organization, strategy, individuals, information systems, and the external environment (Birkinshaw et al., 2008)? Second, to what extent do these components, once aligned, explain managerial performance, understood as the ability to coordinate collective action, mobilize

resources, and achieve strategic and operational objectives (Mintzberg, 1973; Fayol, 1916/2016)? In other words, which internal and external factors are the most decisive for managerial performance, and how are they shaped by managerial innovation processes?

This research aims to address these questions by analyzing the role of the strategic–organizational environment (SOE) as an integrated configuration of internal and external factors structuring SME managerial performance, in connection with managerial innovation. The SOE is conceptualized as a second-order construct encompassing five complementary dimensions: internal organization, strategy, individuals, information systems, and the external environment. Managerial innovation is considered a key antecedent of this environment, as it transforms the structures, processes, and practices underlying managerial action (Birkinshaw et al., 2008). Managerial performance is assessed through several dimensions, including leadership, interpersonal relationships, technical expertise, and collective behaviors.

Empirically, the study is based on a quantitative survey conducted among 103 SMEs in the Souss-Massa region (Morocco) and employs structural equation modeling using the PLS-SEM approach. This method is particularly suitable for analyzing complex models involving second-order constructs and multiple relationships between latent variables (Hair, Hult, Ringle, & Sarstedt, 2017). The findings show, first, that managerial innovation significantly influences all components of the SOE, particularly internal organization, information systems, and individuals. Second, these components exert a direct and significant effect on the different dimensions of managerial performance, confirming the central role of internal and external factors in SME performance dynamics.

This article makes three main contributions. From a theoretical perspective, it proposes an integrated view of the strategic–organizational environment as an interface between managerial innovation and performance, grounded in both contingency theory and dynamic capabilities (Teece, 2007). Empirically, it identifies the SOE components that play a particularly decisive role in explaining SME managerial performance, notably internal organization, information systems, and individuals. From a managerial perspective, it provides SME leaders with operational guidelines to coherently manage internal and external factors influencing performance.

The remainder of the article is structured as follows. Section 2 presents the theoretical framework by defining the strategic–organizational environment, examining its relationship with managerial innovation, and developing the research hypotheses regarding its impact on managerial performance. Section 3 describes the methodology, including the research context,

sample, measurement instruments, and PLS-SEM analytical approach. Section 4 presents the main empirical results concerning the relationships between managerial innovation, the strategic–organizational environment, and managerial performance. Section 5 discusses these findings in light of the existing literature and highlights their theoretical and managerial implications. Finally, Section 6 outlines the study’s limitations and suggests directions for future research.

1. Theoretical Framework and Hypotheses Development

Before examining in detail the different dimensions of the strategic–organizational environment, it is necessary to clarify the conceptual framework underpinning this notion. Analyzing SME managerial performance requires a systemic perspective that goes beyond a fragmented view of explanatory factors. In this regard, organizational theory emphasizes the need to consider the firm as a coherent system of interdependent mechanisms, in which structures, processes, and interactions with the environment evolve jointly (Lawrence & Lorsch, 1967; Mintzberg, 1979). Such an approach leads to viewing the strategic–organizational environment not as a simple aggregation of isolated variables, but rather as an integrated configuration of internal and external factors whose alignment shapes managerial effectiveness and, ultimately, performance (Donaldson, 2001; Teece, 2007). While the concepts of organizational context, internal environment, and organizational capabilities are widely used in the literature, the strategic–organizational environment (SOE) proposed in this study differs by its integrative and configurational nature. Unlike organizational context, which generally refers to background conditions surrounding managerial action, or organizational capabilities, which focus on the firm’s abilities to deploy resources and routines, the SOE is understood here as a structured configuration of interdependent internal and external factors that jointly shape managerial action. It explicitly articulates structural, strategic, human, informational, and environmental dimensions within a unified analytical framework. This perspective makes it possible to move beyond fragmented approaches and to better explain how managerial performance emerges from the alignment of these factors (Donaldson, 2001; Teece, 2007).

1.1. The Strategic–Organizational Environment as a Configuration of Internal and External Factors

The strategic–organizational environment (SOE) refers to the set of internal and external factors that structure managerial action and influence both the adoption and effectiveness of management practices. From a contingency perspective, performance does not stem from the application of universal best practices but from the fit between internal organizational

characteristics (structures, systems, human resources) and environmental conditions (dynamism, complexity, competitive intensity) (Burns & Stalker, 1961; Lawrence & Lorsch, 1967; Donaldson, 2001). The SOE can therefore be understood as a configuration of factors whose interaction creates conditions that are more or less conducive to effective management. Internally, the SOE encompasses the organizational structure, including how units are arranged, roles are defined, and authority is distributed (Mintzberg, 1979); strategy, which guides the firm's priorities and decision-making (Porter, 1980); individuals, in terms of their competencies, motivation, and engagement (Becker, 1964); and the information system, which determines the availability, reliability, and timeliness of information required for decision-making and control (Laudon & Laudon, 2016). Externally, the SOE includes the broader competitive environment, such as market dynamism, competitive pressure, stakeholder demands, regulatory constraints, and macroeconomic uncertainty (Porter, 1980; Dess & Beard, 1984).

In this study, the SOE is conceptualized as a second-order formative construct composed of five complementary dimensions: (1) internal organization, (2) strategy, (3) individuals, (4) information systems, and (5) the external environment. While each dimension represents a distinct lever, it is their combined effect and alignment that ultimately determine the quality of the context within which managerial activities are carried out (Donaldson, 2001).

1.2. Managerial Innovation and the Transformation of the Strategic–Organizational Environment

Managerial innovation can be defined as the introduction or reconfiguration of management practices, processes, and structures aimed at enhancing organizational performance and adaptability (Birkinshaw, Hamel, & Mol, 2008; Damanpour & Aravind, 2012). It includes, for instance, the adoption of participative leadership styles, the implementation of continuous improvement initiatives, and the redesign of organizational structures to promote agility and cross-functionality. The literature suggests that managerial innovation is not limited to isolated changes but reflects a broader, systemic transformation of management practices (Mol & Birkinshaw, 2009).

From this perspective, managerial innovation can be viewed as a key antecedent of the SOE. On the one hand, it reshapes internal organization by redefining responsibilities, streamlining decision-making processes, and fostering more horizontal coordination mechanisms (Mintzberg, 1979; Birkinshaw et al., 2008). On the other hand, it influences strategy by encouraging firms to reassess their positioning and resource allocation choices (Porter, 1980).

It also affects the human dimension by introducing new approaches to skills development, recognition, and participation (Becker, 1964), while often involving the modernization of information systems that support decision-making and control processes (Laudon & Laudon, 2016).

Furthermore, by enhancing firms' ability to interpret their environment, develop partnerships, and respond more rapidly to changes, managerial innovation strengthens the interface with the external environment and contributes to the development of adaptive and sensing capabilities (Teece, 2007).

Prior research generally supports the positive contribution of managerial innovation to organizational outcomes. However, empirical findings remain heterogeneous, especially in SME contexts where limited resources, low formalization, and centralized decision-making may constrain implementation and reduce the effectiveness of managerial innovation. Several studies suggest that its impact depends less on the mere adoption of innovative managerial practices than on the degree of alignment between these practices and the firm's broader organizational and environmental conditions. This observation reinforces the relevance of examining managerial innovation through the lens of the strategic–organizational environment. Based on these findings, the first hypothesis is formulated:

H1: Managerial innovation positively influences all dimensions of the strategic–organizational environment (internal organization, strategy, individuals, information systems, and external environment).

1.3.The Strategic–Organizational Environment as a Determinant of Managerial Performance

Managerial performance is defined here as the ability of managers to organize collective action, mobilize and coordinate resources, and achieve both strategic and operational objectives (Mintzberg, 1973; Fayol, 1916/2016). It is reflected in several complementary dimensions, including leadership, interpersonal relationships, technical expertise, and collective behaviors. The literature indicates that such performance depends not only on managers' individual characteristics but also, to a significant extent, on the organizational and strategic context in which they operate (Donaldson, 2001). A well-structured internal environment, reliable information systems, a clearly articulated strategy, and a committed and competent workforce create favorable conditions for effective management. Conversely, loosely defined structures, inadequate information systems, unclear strategic orientations, or low employee engagement can limit managerial effectiveness, even when managers possess strong individual capabilities.

In addition, the characteristics of the external environment—particularly its dynamism, uncertainty, and competitive intensity—impose specific requirements in terms of responsiveness and adaptability (Dess & Beard, 1984; Teece, 2007). SMEs that are able to anticipate environmental changes and align them with their internal structures and managerial practices are better positioned to sustain high levels of managerial performance.

Based on these elements, the second hypothesis is formulated:

H2: The strategic–organizational environment has a positive and significant effect on SME managerial performance.

Although the theoretical framework suggests that the strategic–organizational environment may play a mediating role between managerial innovation and managerial performance, this mediating effect is not formally tested in the present study. The objective here is to examine the direct structuring relationships between managerial innovation and the SOE, on the one hand, and between the SOE and managerial performance, on the other. Nevertheless, the model provides a basis for future research to test this mediation explicitly through indirect effect analysis in a PLS-SEM framework.

These two hypotheses structure the empirical analysis that follows. They make it possible to examine, first, how managerial innovation contributes to reshaping the strategic–organizational environment (H1), and second, how this environment becomes a central determinant of managerial performance (H2).

2. Methodology

To empirically examine the relationships between managerial innovation, the strategic–organizational environment, and managerial performance, a quantitative research design was adopted. This approach is particularly appropriate for testing theoretically grounded hypotheses and analyzing complex relationships among latent constructs in management research (Hair et al., 2017; Saunders et al., 2019). The methodology is structured around three main components: the research context and sample, the measurement of constructs, and the data analysis strategy.

2.1. Research Context and Sample

The empirical study was conducted among small and medium-sized enterprises (SMEs) located in the Souss-Massa region of Morocco. This region is characterized by a high level of sectoral diversity, including agri-food, tourism, healthcare, education, trade, and various service activities, as well as a strong prevalence of family-owned businesses. These features make it a relevant setting for examining the interaction between internal and external factors and their impact on managerial performance, particularly in environments marked by resource

constraints and uncertainty, which are typical of emerging economies (Julien, 1997; Torrès, 1999).

The final sample consists of 103 SMEs selected based on three main criteria: employing between 10 and 250 employees, in line with the standard SME definition (OECD, 2005); having been in operation for at least three years to ensure a minimum level of organizational stability; and having a respondent holding a managerial or supervisory position capable of providing reliable information on management practices, organizational context, and managerial performance. The sampling procedure was based on a non-probabilistic convenience approach, given the difficulty of accessing SME managers and obtaining complete organizational information in the regional context studied. Although this sampling strategy limits statistical generalizability, it remains consistent with exploratory empirical research in SME settings, where access constraints are significant (Saunders, Lewis, & Thornhill, 2019).

Data were collected through a structured questionnaire administered either face-to-face or electronically, following established methodological guidelines in management research (Saunders, Lewis, & Thornhill, 2019).

The main characteristics of the sample are presented in Table 1.

Table 1. Main Characteristics of the Sample (n = 103 SMEs)

Characteristic	Value / Distribution
Sample size	103 SMEs
Region	Souss-Massa (Morocco)
Dominant sector	Agri-food (42.7%)
Predominant legal form	Family businesses (63.1%)
Median firm age	25 years
Sectoral diversity	11 sectors represented

Source: Authors' calculations based on primary data

2.2.Measurement of Constructs

The main constructs investigated in this study are managerial innovation (MI), the strategic–organizational environment (SOE), and managerial performance (MP). These constructs were operationalized using multi-item scales adapted from prior literature and pretested during an exploratory qualitative phase with SME managers to ensure clarity and contextual relevance (Churchill, 1979).

2.2.1. Managerial Innovation

Managerial innovation is conceptualized as a second-order reflective construct comprising three dimensions: managerial practices, management processes, and organizational structures.

This conceptualization is consistent with prior research that defines managerial innovation as changes in management practices, processes, and structures (Birkinshaw, Hamel, & Mol, 2008; Damanpour & Aravind, 2012).

Managerial practices include employee participation in decision-making, structured internal communication, encouragement of initiative and creativity, and promotion of collaboration. Management processes refer to the formalization and continuous improvement of key processes, the use of digital tools for monitoring and control, and the optimization of workflows. Organizational structures involve the clarification of roles and responsibilities, decentralization of decision-making, flexibility of internal rules, and adaptation of coordination mechanisms (Mol & Birkinshaw, 2009).

All items were measured using a five-point Likert scale. The results indicate high levels of internal consistency and convergent validity, with Cronbach's alpha values above 0.80, composite reliability above 0.89, and average variance extracted (AVE) above 0.74, meeting recommended thresholds (Hair, Hult, Ringle, & Sarstedt, 2017).

2.2.2. Strategic–Organizational Environment

The strategic–organizational environment is modeled as a second-order formative construct composed of five complementary dimensions, consistent with contingency and systemic perspectives (Donaldson, 2001).

The organizational dimension reflects the degree of formalization, quality of interfunctional coordination, and clarity of responsibilities (Mintzberg, 1979). The strategic dimension captures the clarity of strategic objectives, market orientation, and the firm's ability to anticipate competitive changes (Porter, 1980). The individual dimension encompasses employees' skills, motivation, engagement, and learning capacity (Becker, 1964). The information system dimension relates to the availability, reliability, and accessibility of information (Laudon & Laudon, 2016). Finally, the external environment includes market dynamism, competitive intensity, and environmental uncertainty (Dess & Beard, 1984).

The measurement results show satisfactory levels of reliability and validity (Cronbach's alpha > 0.79, composite reliability > 0.88, AVE > 0.61), confirming the robustness of the construct dimensions (Hair et al., 2017).

2.2.3. Managerial Performance

Managerial performance is conceptualized as a second-order reflective construct comprising four dimensions: leadership and supervision, interpersonal relationships, technical expertise,

and collective behaviors. This conceptualization is grounded in classical management theories addressing managerial roles and coordination of collective action (Mintzberg, 1973; Fayol, 1916/2016).

Leadership refers to the ability to provide direction and supervise teams; interpersonal relationships relate to communication quality and conflict management; technical expertise concerns efficiency in organizing work and resource utilization; and collective behaviors reflect team cohesion, accountability, and results orientation.

Psychometric indicators confirm the reliability and validity of the scale, with Cronbach's alpha values above 0.82, composite reliability above 0.89, and AVE above 0.74, in line with established standards (Hair et al., 2017).

2.3.Data Analysis Approach: PLS-SEM

Data analysis was conducted using partial least squares structural equation modeling (PLS-SEM), implemented through SmartPLS 4 software. This approach is particularly suitable for complex models involving second-order constructs, moderate sample sizes, and research objectives focused on prediction and the exploration of relationships between latent variables (Hair et al., 2017; Henseler, Ringle, & Sinkovics, 2009).

The analysis followed a two-step procedure. First, the measurement model was assessed by examining internal consistency reliability (Cronbach's alpha and composite reliability), convergent validity (AVE), and discriminant validity using the Fornell–Larcker criterion and the HTMT ratio. The results met all recommended thresholds, confirming the adequacy of the measurement model (Fornell & Larcker, 1981; Henseler et al., 2015).

Second, the structural model was evaluated by estimating path coefficients for the hypothesized relationships between managerial innovation and the SOE (H1), and between the SOE and managerial performance (H2). Statistical significance was assessed באמצעות a bootstrapping procedure with 5,000 resamples, providing t-values and p-values. Coefficients of determination (R^2) were also examined to assess the explanatory power of the model (Hair et al., 2017).

Given that the data were collected through a single questionnaire administered to one respondent per firm, the potential risk of common method bias was considered. To address this issue, Harman's single-factor test was conducted and indicated that no single factor accounted for the majority of the total variance. In addition, full collinearity diagnostics were examined, and all variance inflation factor (VIF) values remained below the recommended threshold of 3.3, suggesting that common method bias is unlikely to pose a serious threat to the validity of the results (Kock, 2015).

This analytical approach enables a robust examination of the structuring role of managerial innovation in shaping the strategic–organizational environment and its subsequent impact on managerial performance, while accounting for the complexity of the constructs involved.

3. Results

This section reports the main empirical findings derived from the data analysis. It aims to examine the relationships between managerial innovation, the strategic–organizational environment, and managerial performance, in line with the proposed hypotheses. The results are presented sequentially, first focusing on the effects of managerial innovation on the strategic–organizational environment, and then on the impact of this environment on managerial performance, in order to reflect the logic of the tested model.

3.1.Measurement Model Assessment

Before testing hypotheses H1 and H2, the psychometric properties of the measurement scales were evaluated. The findings indicate high levels of internal consistency and satisfactory convergent validity across all dimensions of managerial innovation, the strategic–organizational environment, and managerial performance. Cronbach’s alpha coefficients exceed 0.79, composite reliability (ρ_C) values are above 0.88, and average variance extracted (AVE) values are greater than 0.61, meeting the thresholds recommended in the PLS-SEM literature (Hair, Hult, Ringle, & Sarstedt, 2017).

Discriminant validity is also established, as the square roots of AVE are higher than inter-construct correlations, and HTMT ratios remain below the recommended threshold of 0.85 (Henseler, Ringle, & Sarstedt, 2015). These results confirm that the constructs are reliable, exhibit adequate convergence, and are empirically distinct, thereby supporting the suitability of the measurement model for subsequent structural analysis.

In addition to these psychometric assessments, the structural model evaluation also considered complementary indicators commonly recommended in PLS-SEM studies, including coefficients of determination (R^2), effect sizes (f^2), predictive relevance (Q^2), and the standardized root mean square residual (SRMR). These indicators provide additional insight into the explanatory power, practical significance, predictive capability, and overall fit of the model (Hair et al., 2017).

The structural model exhibits satisfactory explanatory and predictive capacity. The R^2 values indicate a meaningful level of variance explained in the endogenous constructs, while the f^2 and Q^2 statistics confirm the substantive contribution and predictive relevance of the model. In

addition, the SRMR value remains within the acceptable threshold, supporting the adequacy of the overall model fit.

3.2. Effects of Managerial Innovation on the Strategic–Organizational environment

Hypothesis H1 posits that managerial innovation positively affects all dimensions of the strategic–organizational environment. The path coefficients estimated using PLS-SEM provide strong support for this assumption, showing that managerial innovation significantly influences all five components of the SOE: internal organization, strategy, individuals, information systems, and the external environment.

Table 2. Effects of Managerial Innovation on SOE Dimensions (H1)

Tested Relationship	β Coefficient	t-value	p-value	Hypothesis Status
MI → Internal organization	0.512	6.217	< 0.001	Supported
MI → Information systems	0.488	5.894	< 0.001	Supported
MI → Individuals	0.454	5.321	< 0.001	Supported
MI → Strategy	0.339	2.891	0.004	Supported
MI → External environment	0.300	2.517	0.012	Supported

Source: Authors' elaboration based on PLS-SEM results.

The strongest effects are observed for internal organization ($\beta = 0.512$; $p < 0.001$) and information systems ($\beta = 0.488$; $p < 0.001$), suggesting that managerial innovation is primarily associated with structural changes—such as clearer roles, streamlined decision processes, and improved coordination—as well as with the modernization of information systems, including digitalization and enhanced data reliability.

The significant effect on the individual dimension ($\beta = 0.454$; $p < 0.001$) highlights the central role of human capital in managerial innovation processes. Innovative management practices appear to be closely linked to initiatives aimed at enhancing skills, motivation, and employee engagement, reinforcing the idea that individuals are key drivers of organizational transformation.

Although comparatively lower, the effects on strategy ($\beta = 0.339$; $p = 0.004$) and the external environment ($\beta = 0.300$; $p = 0.012$) remain statistically significant. These findings indicate that managerial innovation also contributes to refining strategic orientation and strengthening the firm's ability to interpret and respond to external constraints and opportunities.

Overall, these results demonstrate that managerial innovation plays a structuring role in shaping the strategic–organizational environment of SMEs, influencing both internal configurations and external interactions. Hypothesis H1 is therefore fully supported.

3.3. Effects of the Strategic–Organizational Environment on Managerial Performance

Hypothesis H2 states that the strategic–organizational environment has a positive and significant impact on SME managerial performance. The PLS-SEM results confirm this assumption, showing that the SOE acts as a key determinant of performance, influencing all dimensions of managerial activity.

Table 3. Effects of SOE on Managerial Performance Dimensions (H2)

MP Dimension	β Coefficient (SOE $\rightarrow$ MP)	t-value	p-value	Status
Leadership and supervision	0.565	> 6.5	< 0.001	Supported
Interpersonal relationships	0.561	> 6.5	< 0.001	Supported
Technical expertise	0.486	> 6.0	< 0.001	Supported
Collective behaviors	0.530	> 6.2	< 0.001	Supported

Source: Authors' elaboration based on PLS-SEM results.

The estimated coefficients indicate that the SOE exerts a strong and significant influence on leadership and supervision ($\beta = 0.565$; $p < 0.001$), suggesting that a well-structured internal environment supported by effective information systems facilitates direction setting, performance monitoring, and team support. Similarly, interpersonal relationships ($\beta = 0.561$; $p < 0.001$) benefit from clear organizational arrangements, efficient information flows, and shared strategic orientations, which enhance communication quality, conflict management, and collaboration.

The effect on technical expertise ($\beta = 0.486$; $p < 0.001$) indicates that structured processes, effective coordination, and reliable information contribute to operational efficiency and execution quality. Furthermore, the impact on collective behaviors ($\beta = 0.530$; $p < 0.001$) highlights the importance of an environment that fosters engagement, learning, and cohesion in promoting teamwork, accountability, and results orientation.

These findings suggest that managerial performance is not solely determined by individual managerial capabilities but is strongly embedded in a broader organizational and environmental context that either supports or constrains managerial action (Donaldson, 2001; Teece, 2007). In this sense, the strategic–organizational environment constitutes a key lever for enhancing managerial performance in SMEs.

Hypothesis H2 is therefore fully supported: the more structured and aligned the strategic–organizational environment, the higher the level of managerial performance.

4. Discussion

This section aims to interpret the empirical findings in light of the theoretical frameworks mobilized and to derive their main implications. The discussion is structured around three

complementary perspectives: the structuring role of the strategic–organizational environment in linking managerial innovation to performance, the relative importance of internal factors, and the contribution of strategy and the external environment to SMEs’ adaptive capacity.

4.1.The Strategic–Organizational Environment as an Interface Between Managerial Innovation and Performance

The results confirm that the strategic–organizational environment (SOE) plays a central role in the performance dynamics of SMEs, acting as an interface between managerial innovation initiatives and observed managerial outcomes. Managerial innovation primarily operates as a transformation mechanism of the SOE: it reshapes internal structures, modernizes information systems, enhances employees’ skills and engagement, refines strategic orientation, and improves the firm’s ability to interact with its external environment. These transformations create more favorable conditions for managerial action, which subsequently translate into improved managerial performance.

This interpretation is consistent with contingency theory, which posits that performance depends on the alignment between internal organizational characteristics and environmental constraints (Lawrence & Lorsch, 1967; Donaldson, 2001). It is also aligned with the dynamic capability’s perspective, which emphasizes that a firm’s ability to reconfigure its resources, structures, and processes in response to environmental changes constitutes a key source of sustained performance (Teece, 2007). Within this framework, managerial innovation can be viewed as a dynamic capability that primarily operates through modifications of the SOE, with this reconfigured set of internal and external factors enabling managers to perform their roles of coordination, control, and resource mobilization more effectively.

Compared with earlier empirical studies, which often examine isolated factors such as strategy, human resources, or organizational structure separately, the present study highlights the combined and configurational effect of these dimensions within a unified framework. In this respect, it provides a more integrated understanding of managerial performance in SMEs and helps bridge the gap between fragmented empirical evidence and systemic theoretical approaches.

4.2.The Primacy of Internal Factors: Organization, Individuals, and Information Systems

Among the dimensions of the SOE, the findings indicate that managerial innovation has particularly strong effects on internal organization, information systems, and individuals, and

that these dimensions play a decisive role in explaining managerial performance. This highlights the predominance of internal factors in shaping SME performance dynamics.

The strong impact on internal organization underscores the importance of clearly defined responsibilities, effective coordination across functions, and an appropriate level of process formalization. In SMEs where structures are often flexible but sometimes insufficiently formalized managerial innovation initiatives aimed at clarifying roles, simplifying decision-making processes, and establishing planning routines can significantly enhance managers' ability to organize work and monitor objectives (Mintzberg, 1979).

The central role of individuals confirms that human capital is a critical driver of managerial performance. Managerial innovations that invest in skills development, employee motivation, and engagement strengthen teams' capacity to collaborate, learn, and adapt. This, in turn, improves collective behaviors, interaction quality, and technical performance. These findings are consistent with prior research emphasizing the importance of human resources and organizational commitment in SME performance (Becker, 1964).

Furthermore, the modernization of information systems emerges as a key lever for supporting managerial performance. Reliable and responsive information systems enhance the availability and quality of data required for decision-making, reduce uncertainty, and facilitate coordination across activities. In contexts characterized by limited resources, even modest investments in appropriate management tools can generate substantial performance gains (Laudon & Laudon, 2016).

4.3. The Role of Strategy and the External Environment in Adaptive Capacity

Although internal factors (organization, individuals, and information systems) appear to be primary levers, the results also show that strategy and the external environment play a significant role in performance dynamics. The influence of managerial innovation on strategy suggests that innovation processes extend beyond operational adjustments and are often accompanied by a reassessment of the firm's positioning, priorities, and medium-term objectives. A clear and shared strategy provides a reference framework that enables managers to align decisions and actions with coherent organizational goals (Porter, 1980).

The impact of the external environment on managerial performance further indicates that SMEs cannot be analyzed independently of their context. A dynamic, competitive, and uncertain environment imposes specific requirements in terms of strategic vigilance, responsiveness, and adaptability (Dess & Beard, 1984; Teece, 2007). SMEs that are able to anticipate environmental

changes and integrate them into their internal structures and managerial practices are better positioned to sustain high levels of managerial performance, even under constrained conditions. Overall, these findings highlight the importance of jointly considering internal and external factors. Managerial performance is not solely determined by the quality of internal resources and structures, but also by the extent to which these elements are aligned with the characteristics of the external environment.

Conclusion

This study aimed to examine the role of internal and external factors within the strategic–organizational environment (SOE) in explaining managerial performance in small and medium-sized enterprises (SMEs), in connection with managerial innovation dynamics. Using a quantitative approach based on PLS-SEM applied to a sample of 103 SMEs from the Souss-Massa region, the findings provide meaningful insights into the mechanisms underlying managerial performance in contexts characterized by uncertainty and resource constraints.

The empirical results first indicate that managerial innovation significantly influences all dimensions of the strategic–organizational environment. This influence is particularly pronounced in relation to internal organization, information systems, and individuals, highlighting that managerial innovation involves more than incremental adjustments and instead entails substantial transformations in structures, processes, and organizational practices. By reshaping responsibilities, improving information flows, and strengthening employee skills and engagement, managerial innovation contributes to redefining the conditions under which managerial activities are performed.

Second, the findings show that the strategic–organizational environment constitutes a key determinant of managerial performance. Its different dimensions exert a significant influence on core managerial functions, including leadership, interpersonal relationships, technical effectiveness, and collective behaviors. Managerial performance thus emerges as the outcome of a coherent configuration of internal and external factors, rather than the result of isolated managerial actions or individual competencies. This perspective underscores the importance of viewing the firm as an integrated system in which the quality of the organizational environment conditions the effectiveness of management practices.

From a theoretical standpoint, these results contribute by offering an integrated perspective on the relationship between managerial innovation and performance, mediated by the strategic–organizational environment. They suggest moving beyond a linear interpretation toward a systemic approach, consistent with contingency theory and the dynamic capabilities

framework. In this view, managerial innovation can be understood as a capability that enables the reconfiguration of resources, structures, and processes, while the SOE represents the context through which these transformations translate into performance outcomes. This articulation enhances the understanding of value creation mechanisms in SMEs by emphasizing the structuring role of the organizational environment.

Methodologically, the study demonstrates the relevance of PLS-SEM for analyzing complex models involving second-order constructs, whether reflective or formative. Conceptualizing the SOE as a multidimensional construct combining internal and external factors also represents a contribution, as this concept is often addressed in a fragmented manner in prior research. This approach allows for a more comprehensive understanding of organizational dynamics and provides a more nuanced view of the determinants of managerial performance.

From a managerial perspective, the findings highlight that improving performance cannot be reduced to the isolated adoption of new practices or management tools. Instead, SME managers should act simultaneously on several complementary levers. First, they should strengthen internal organization by clarifying roles, improving coordination, and structuring decision-making processes. Second, they should invest in information systems adapted to their size and needs in order to improve the reliability, circulation, and use of information. Third, they should promote employee engagement through participative practices, skills development, and greater involvement in organizational objectives. These actions are likely to be more effective when they are aligned with the firm's strategic priorities and with the constraints and opportunities of the external environment.

This study nevertheless has several limitations. The focus on SMEs within a single region may limit the generalizability of the findings to other geographical or sectoral contexts. Furthermore, the cross-sectional design does not capture the temporal dynamics of the relationships between managerial innovation, the strategic–organizational environment, and performance. Finally, the reliance on self-reported data may introduce perceptual or social desirability biases.

These limitations open several avenues for future research. Subsequent studies could extend the analysis to other regions or countries in order to test the robustness of the findings across contexts. Longitudinal designs would also be valuable for capturing the evolution of these relationships over time. In addition, incorporating moderating variables such as organizational culture, firm size, or industry characteristics could further enrich the analysis. A particularly promising direction would be to explicitly examine the mediating role of the strategic–

organizational environment in the relationship between managerial innovation and performance, by testing indirect effects using mediation models.

By conceptualizing the strategic–organizational environment as an integrated configuration of internal and external factors and by empirically showing its structuring role, this study provides a more systemic understanding of how managerial innovation translates into managerial performance in SMEs. It therefore contributes to the literature by proposing an analytical framework that helps articulate organizational change, contextual alignment, and performance outcomes within a single perspective.

In conclusion, this study highlights that, in environments characterized by uncertainty, competitive pressure, and resource constraints, the ability of SMEs to structure and continuously adjust their strategic–organizational environment through managerial innovation represents a critical lever for enhancing managerial performance. Managerial innovation should therefore not be viewed as a peripheral activity, but as a fundamental driver of organizational resilience and long-term competitiveness.

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