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Multiple Routes to Manufacturing SME Performance in DKI Jakarta: An fsQCA Study of Entrepreneurial Orientation, Normative Pressure, and Dynamic Capabilities

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Abstract

This study explains why manufacturing SMEs in DKI Jakarta, Indonesia, achieve different performance outcomes under similar external conditions. Drawing on dynamic capability theory, it examines entrepreneurial orientation, normative pressure, and dynamic capabilities as interdependent configurations rather than isolated linear predictors. Using 314 calibrated SME responses, fuzzy-set qualitative comparative analysis evaluates five conditions: innovativeness, proactiveness, normative pressure, sensing capability, and reconfiguration capability. The results identify two robust pathways to positive performance, with overall solution coverage of 0.870 and consistency of 0.961, and two exploratory pathways to negative performance, with coverage of 0.835 and consistency of 0.767. Strong performance arises through a normatively supported proactive-sensing pathway and an entrepreneurial-capability pathway combining innovativeness, proactiveness, sensing, and reconfiguration. Weak performance occurs when firms sense external expectations but lack innovativeness and reconfiguration capability, or when all five conditions are absent. These negative configurations require caution because their consistency and PRI support are weaker. The findings show that sensing capability alone does not ensure superior performance; its contribution depends on alignment with entrepreneurial and reconfiguration capacities. The study advances SME performance research by demonstrating that configurational interdependencies explain outcomes more effectively than separate antecedents. It also reveals causal asymmetry between pathways producing strong and weak performance.

KEYWORDS

fsQCA; entrepreneurial orientation; institutional pressure; dynamic capabilities; Indonesia.

Introduction

Manufacturing SMEs in DKI Jakarta constitute a distinctive empirical setting because they operate in Indonesia's largest metropolitan market, where market opportunity is accompanied by dense urban competition, high-cost pressure, volatile customer demand, and rapid shifts in digital-commercial channels. These firms compete not only with other local producers, but also with larger manufacturers and digitally connected suppliers and distributors. At the same time, they face visible institutional expectations related to product quality, formal business practices, certification or standard compliance, business partnerships, training participation, access to institutional financing, and the use of information technology in marketing and operations. Official regional statistics on micro and small manufacturing industries in DKI Jakarta show that the sector is monitored through the number and distribution of firms, entrepreneur and worker profiles, business partnerships, counselling, sources of capital,

marketing practices, annual income, and information-technology use (BPS-Statistics DKI Jakarta Province, 2025a). Manufacturing performance in the province is also periodically captured through production-indexsurveys, indicating the continuing policy and economic relevance of manufacturing activity across firm-size categories in the regional economy (BPS-Statistics DKI Jakarta Province, 2025b). These conditions make DKI Jakarta manufacturing SMEs an appropriate setting for examining why some firms achieve stronger performance while others struggle under similar external conditions.

Unlike larger firms, manufacturing SMEs often operate with constrained managerial, financial, and technological resources, which limits their ability to convert external opportunities and institutional expectations into improved performance. Prior research shows that entrepreneurial orientation contributes more strongly to small-business performance when it is aligned with firms' resources and environmental conditions (Wiklund & Shepherd, 2005). For this reason, SME performance cannot be understood only through financial indicators such as profitability or sales growth. Instead, firm performance should be examined as a multidimensional construct that includes financial, operational, and broader organizational outcomes (Venkatraman & Ramanujam, 1986). It should also be examined as a broader competitive outcome shaped by how firms recognize opportunities, respond to external pressures, and realign internal resources. Institutional theory suggests that firms do not merely conform passively to external pressures, but may adopt different strategic responses to institutional demands depending on the nature of the pressure and their capacity for agency (Oliver, 1991). Similarly, the dynamic capabilities perspective argues that sustained performance in changing environments depends on firms' ability to integrate, build, and reconfigure internal and external competences (Teece et al., 1997). This study therefore approaches SME performance as a multidimensional outcome that depends on the interaction between entrepreneurial orientation, institutional pressure, and dynamic capabilities.

This study further integrates entrepreneurial orientation and institutional pressure into the dynamic capability perspective. Entrepreneurial orientation is represented by innovativeness and proactiveness, which capture the firm's tendency to support new ideas, pursue opportunities, and act ahead of competitors. Institutional pressure is represented by normative pressure, which reflects expectations from industry norms, professional standards, customers, suppliers, and other external stakeholders. Previous SME performance research has shown that entrepreneurial orientation, institutional pressure, and dynamic capabilities are important, but much of this literature has examined them as separate net-effect predictors or has focused on one theoretical domain at a time. Consequently, limited evidence explains how these conditions combine configurationally, whether the same condition can support different outcomes depending on its accompanying conditions, and whether the recipes associated with weak performance differ from those associated with strong performance. This gap is especially relevant in DKI Jakarta manufacturing SMEs because opportunity seeking, normative alignment, and capability constraints occur simultaneously in a highly dense urban market.

Accordingly, this study examines manufacturing SMEs in DKI Jakarta through a configurational research design rather than by reporting detailed findings in the introduction. The study addresses two research questions: RQ1: Which configurations of innovativeness, proactiveness, normative pressure, sensing capability, and reconfiguration capability are sufficient for positive SME performance? RQ2: Which configurations of these conditions are associated with negative SME performance? The objective is to identify asymmetric causal recipes explaining positive and negative SME performance among DKI Jakarta manufacturing SMEs. The study contributes to the SME performance literature by integrating entrepreneurial orientation, normative pressure, and dynamic capabilities into a single fsQCA model; analyzing positive and negative performance as distinct outcomes; and providing contextual evidence from Indonesian manufacturing SMEs, where firms must simultaneously manage opportunity recognition, stakeholder expectations, and resource reconfiguration.

Literature Review

Theoretical Background

Dynamic capability theory offers the central theoretical basis for understanding how SMEs remain responsive, renew their resources, and protect performance when business environments become uncertain or unstable. Within strategic management, this theory was developed to explain why firms must go beyond fixed routines and instead revise, combine, and redeploy their competences when existing ways of operating no longer fit external conditions. Teece et al. (1997) describe dynamic capabilities as the firm's capacity to integrate, develop, and reshape internal and external competences in rapidly changing environments. Eisenhardt & Martin (2000) view these capabilities as concrete organizational processes that help firms adjust to market shifts, while Helfat & Peteraf (2003) emphasize that capabilities develop over time through stages of formation, growth, transformation, and decline. Teece (2007) later organized the theory around three major activities: sensing, seizing, and reconfiguring. This study focuses on sensing and reconfiguration because its main theoretical interest lies in the connection between recognizing external signals and realigning internal resources. Sensing refers to an SME's ability to recognize, interpret, and assess new opportunities and threats, whereas reconfiguration refers to its ability to adjust resources, routines, and operational practices in response to environmental change. Seizing is not modelled as a separate condition because the opportunity-action element of seizing is partly captured in this study by proactiveness and innovativeness, while adding a sixth condition would substantially increase truth-table complexity. Thus, the omission narrows the empirical scope of the model rather than rejecting the broader dynamic capability framework. These two capabilities are especially important for SMEs because smaller firms often face resource limitations, making it essential for them to detect external changes early and reorganize their internal activities effectively to support stronger performance.

Based on this theoretical reasoning, the study explains SME performance by examining how entrepreneurial orientation, institutional pressure, and dynamic capabilities work together rather than separately. Entrepreneurial orientation is captured through innovativeness and proactiveness, which reflect the extent to which SMEs introduce new ideas, pursue emerging opportunities, and take action ahead of competitors. Institutional pressure is represented by normative pressure, which refers to expectations arising from industry practices, professional standards, customers, suppliers, and other external stakeholders. From a dynamic capability perspective, normative pressure provides important external cues, while

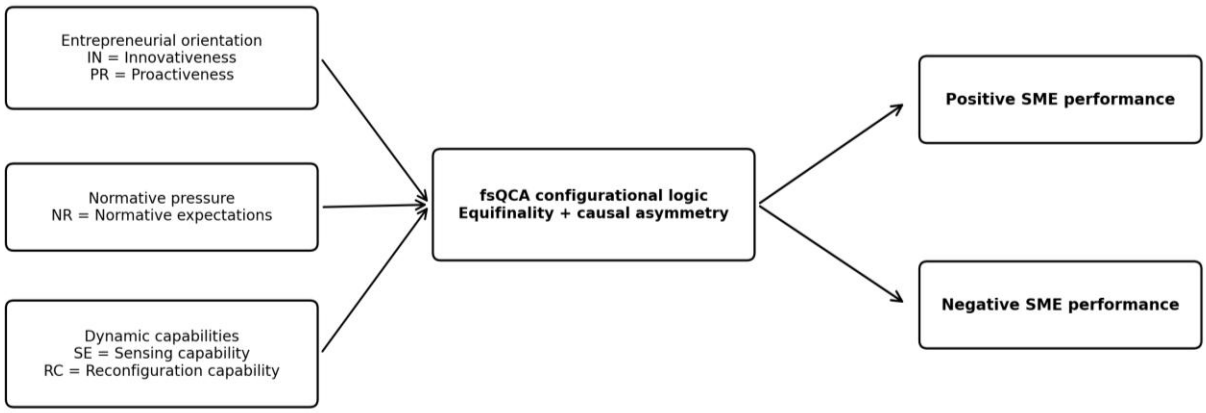

Figure 1. The Study's Proposed Conceptual Framework
Note: IN = Innovativeness; PR = Proactiveness; NR = Normative Pressure; SE = Sensing Capability; RC = Reconfiguration Capability

innovativeness and proactiveness influence how SMEs interpret and respond to those cues. Sensing and reconfiguration then serve as the adaptive processes through which SMEs convert entrepreneurial behavior and institutional expectations into performance results. Instead of treating each condition as having a separate linear effect, this study applies a set-theoretic view, where both strong and weak SME performance may result from different combinations of conditions. This approach aligns with fuzzy-set qualitative comparative analysis because it recognizes equifinality and causal asymmetry: several distinct pathways may lead to high SME performance, while the patterns linked to low performance do not have to be the simple reverse of successful configurations (Fiss, 2011; Ragin, 2008). Accordingly, the study investigates how innovativeness, proactiveness, normative pressure, sensing capability, and reconfiguration capability combine to explain positive and negative SME performance outcomes.

The Study's Framework

The proposed framework in Figure 1 organizes the study's main ideas by breaking each broad construct into its key dimensions and showing how these dimensions may combine to explain both favorable and unfavorable SME performance. In this model, entrepreneurial orientation is reflected in innovativeness and proactiveness, institutional pressure is captured through normative pressure, and dynamic capabilities are represented by sensing and reconfiguration capabilities. The causal logic is configurational. Innovativeness provides the capacity to generate and introduce new ideas, while proactiveness reflects forward-looking action before competitors respond. Normative pressure provides external legitimacy cues from industry standards, professional expectations, customers, suppliers, and peer practices. Sensing capability allows SMEs to detect market and institutional signals, whereas reconfiguration capability enables them to modify resources, routines, and processes in response to those signals. The framework does not treat these factors as separate variables that influence performance in a simple one-way manner. Instead, it views SME performance as the result of condition patterns that work together within a given context. Positive and negative performance are analyzed separately because the absence of high performance does not necessarily represent the presence of low performance. This position follows the logic of fuzzy-set qualitative comparative analysis, where the same outcome can arise through different routes and where the causes of weak performance do not have to mirror the causes of strong performance. Fainshmidt et al. (2019) support the importance of strategic fit in the value of dynamic capabilities, Huang et al. (2023) show that entrepreneurial-orientation dimensions can operate configurationally, and Mostafiz et al. (2025) demonstrate the usefulness of combining entrepreneurial orientation with dynamic capability conditions in explaining performance. Accordingly, the framework argues that SME performance can be understood more accurately by analyzing how entrepreneurial orientation, normative pressure, sensing capability, and reconfiguration capability interact across multiple causal pathways.

SMEs Performance

SME performance describes how well a small or medium-sized enterprise fulfills its financial goals, strengthens its competitive position, and advances its broader strategic objectives. Because SMEs vary widely in size, resources, accounting systems, market reach, and managerial priorities, prior studies generally treat performance as a multidimensional outcome rather than as a narrow financial result. For this reason, SME performance is often evaluated through several comparative indicators, including sales growth, profitability, market standing, and competitiveness against major rivals (Putniņš & Sauka, 2020; Richard et al., 2009). This broader view is important for the present study because SMEs operating in uncertain and resource-constrained environments are unlikely to improve performance through a single factor alone. Their outcomes are more likely to depend on how entrepreneurial orientation, institutional pressure, and dynamic capabilities fit together in practice (Huang et al., 2023). In the proposed configurational model, SME performance serves as the main outcome, while high performance and low performance are analyzed as separate sets rather than opposite ends of one simple scale. This follows set-theoretic logic and the principle of causal asymmetry, which holds that the conditions producing strong performance may differ structurally from those linked to weak performance (Fiss, 2011; Ragin, 2008). Accordingly, this study measures SME performance through relative indicators such as sales growth, profitability, and overall performance compared with competitors, allowing the analysis to identify how different combinations of innovativeness, proactiveness, normative pressure, sensing capability, and reconfiguration capability contribute to either favorable or unfavorable performance outcomes.

Entrepreneurial Orientation

Entrepreneurial orientation describes the way a firm positions itself to discover business possibilities and turn them into purposeful strategic action. It reflects a managerial mindset that encourages firms to move beyond routine operations by searching for new opportunities, responding to market shifts, and building advantage through entrepreneurial behavior. Earlier studies explain that entrepreneurial firms are

commonly recognized by their willingness to innovate, take initiative, and compete through opportunity-seeking actions (Lumpkin & Dess, 1996; Miller, 1983). In this study, entrepreneurial orientation is examined through two specific dimensions: innovativeness and proactiveness. Innovativeness refers to an SME's readiness to encourage creativity, experiment with new approaches, and introduce improved products, services, or internal processes. Proactiveness reflects the firm's ability to look ahead, anticipate customer and market changes, identify emerging opportunities, and act before competitors respond. These two dimensions are analyzed separately because the study uses a configurational logic rather than treating entrepreneurial orientation as one overall score. Risk-taking, autonomy, and competitive aggressiveness are not rejected as entrepreneurial-orientation dimensions; however, they are excluded from the present model for theoretical and methodological parsimony. Innovativeness and proactiveness are the two dimensions most directly aligned with the study's focus on opportunity creation, early strategic action, and the conversion of sensed market signals into performance outcomes. Including additional dimensions would also expand the truth table and make the interpretation of configurations less transparent. Therefore, the study examines how innovativeness and proactiveness combine with normative pressure, sensing capability, and reconfiguration capability to form different routes toward strong or weak SME performance (Huang et al., 2023; Putniņš & Sauka, 2020; Ragin, 2008).

Dynamic Capabilities

Dynamic capabilities describe the capacity of firms to adjust their resources, reshape established routines, and respond effectively when external conditions shift. This perspective argues that organizational performance is not determined only by the resources a firm owns, but also by how well those resources can be redirected when market expectations, competitive pressures, or institutional demands change (Teece et al., 1997). Although Teece (2007) explains dynamic capabilities through the broader activities of sensing, seizing, and reconfiguring, this study concentrates on two dimensions: sensing capability and reconfiguration capability. Sensing capability refers to an SME's ability to scan its environment, recognize market signals, interpret stakeholder expectations, and assess possible opportunities or threats. Reconfiguration capability concerns the firm's ability to reorganize resources, modify routines, adjust structures, and improve operational processes when circumstances require change. These capabilities are examined as separate conditions because an SME may be effective at noticing external developments but less capable of making internal adjustments, while another may be flexible in reorganizing its activities but weaker in detecting early market or institutional signals. In the proposed framework, sensing and reconfiguration act as important adaptive processes that help connect entrepreneurial orientation and normative pressure with SME performance. Their influence is therefore not treated as direct or automatic. Instead, their contribution depends on how they combine with innovativeness, proactiveness, and normative pressure in shaping either strong or weak SME performance outcomes (Fainshmidt et al., 2019; Kump et al., 2019; Teece, 2007).

Institutional Pressure

Within institutional theory, firms are understood as operating within social and professional environments that influence how they should behave, not only through efficiency concerns but also through expectations of legitimacy and acceptability. Although institutional theory identifies coercive, mimetic, and normative pressures, this study concentrates on normative pressure because it is most closely connected to the expectations that affect SMEs in their daily strategic and capability-related decisions (DiMaggio & Powell, 1983). Normative pressure comes from sources such as industry practices, professional codes, customer preferences, supplier expectations, peer behavior, and shared standards of proper business conduct. For SMEs, these expectations are especially significant because smaller firms often depend on credibility, stakeholder confidence, and network acceptance to maintain access to markets and remain competitive. Coercive regulation and mimetic imitation are important institutional forces, but they are excluded from the present model to keep the truth table parsimonious and to concentrate on stakeholder and professional expectations that manufacturing SMEs can interpret and respond to through entrepreneurial and adaptive capabilities. In the proposed configurational model, normative pressure is not treated as a background influence or as a condition with a fixed positive or negative effect. Instead, it is examined as one condition that may work together with innovativeness, proactiveness, sensing capability, and reconfiguration capability. Its contribution to SME performance depends on whether firms have the entrepreneurial mindset and adaptive capacity needed to understand external expectations and respond to them effectively. This perspective allows the study to explain how external demands for legitimacy combine with internal strategic and adaptive strengths to create different pathways toward high or low SME performance (Bag et al., 2022; Fiss, 2011; Oliver, 1991).

Proposition Development

Drawing from dynamic capability theory, this study argues that SME performance is best understood as the result of fit among entrepreneurial behavior, institutional expectations, and the firm's capacity to adapt. Performance is therefore not viewed as the outcome of one separate factor working alone. In the proposed model, entrepreneurial orientation is reflected in innovativeness and proactiveness, institutional pressure is captured through normative pressure, and dynamic capabilities are represented by sensing and reconfiguration capabilities. These five elements are treated as conditions that gain explanatory meaning only when they operate together. The propositions therefore follow directly from the conceptual framework: if performance depends on configurational fit, then no isolated condition should be expected to meet the sufficiency threshold for high performance, and no isolated absent condition should be expected to explain low performance by itself.

Seen in this way, strong SME performance is not expected to emerge from one condition by itself. Innovativeness may help a firm develop fresh ideas, improved offerings, or new ways of working; however, without sensing capability, the firm may struggle to identify which opportunities are worth pursuing. Without reconfiguration capability, it may also lack the ability to reorganize resources, routines, and processes so that innovation produces concrete performance gains. Similarly, proactiveness may allow SMEs to anticipate changes and move before competitors, but early action alone may not improve outcomes if the firm cannot interpret market signals or adjust its internal operations. Normative pressure may encourage SMEs to follow recognized standards and meet stakeholder expectations, yet such pressure does not automatically lead to superior performance unless it is supported by entrepreneurial initiative and adaptive capability. For this reason, the proposed framework assumes that high SME performance arises from a consistent pattern of internal strategic orientation, external institutional expectations, and dynamic capabilities, rather than from any single factor operating independently.

Proposition 1: No single condition alone - innovativeness, proactiveness, normative pressure, sensing capability, or reconfiguration capability - is expected to meet the fsQCA

sufficiency threshold for high SME performance; high SME performance is expected to emerge from configurations of entrepreneurial, institutional, and dynamic-capability conditions.

The same reasoning also applies to weak SME performance, but through the logic of causal asymmetry. The absence of one condition does not automatically mean that an SME will perform poorly, because firms may offset one limitation through other strengths. For instance, an SME with modest innovativeness may still maintain acceptable performance if it is proactive, responsive to normative expectations, and capable of reorganizing its resources effectively. Likewise, limited normative pressure does not necessarily result in weak performance when the firm has strong sensing and reconfiguration capabilities that allow it to identify market opportunities and respond without depending heavily on external expectations. This proposition is assessed in fsQCA by examining both the presence and absence (~) of each condition and by comparing the sufficient configurations for positive and negative performance. Poor performance is therefore expected to arise from specific forms of misalignment among entrepreneurial orientation, normative pressure, and dynamic capabilities, not from the absence of one factor alone (Fiss, 2011; Ragin, 2008).

Proposition 2: No single absent condition alone - the absence of innovativeness, proactiveness, normative pressure, sensing capability, or reconfiguration capability - is expected to meet the fsQCA sufficiency threshold for low SME performance; low SME performance is expected to emerge from asymmetric configurations of absence, presence, and misalignment among the same conditions.

Methods

Operationalization and Measures

The study measures each condition separately so the analysis can show how different factors combine in shaping SME performance. Entrepreneurial orientation is represented by innovativeness and proactiveness. Innovativeness captures SMEs' support for creativity, experimentation, technology use, and the development or improvement of products, services, and internal processes. Proactiveness reflects the firm's tendency to look ahead, identify market opportunities early, and take action before competitors. Normative pressure represents the influence of professional standards, industry expectations, customers, suppliers, and other external stakeholders that encourage SMEs to follow accepted business practices (Beliaeva et al., 2020; Liu et al., 2022).

Dynamic capabilities are measured through sensing and reconfiguration capabilities. Sensing capability captures the firm's ability to monitor market changes, gather useful information, understand customer needs, and learn from good practices in the industry. Reconfiguration capability reflects the firm's ability to adjust resources, redesign processes, respond to changing priorities, and update routines to remain competitive. SME performance is assessed through comparative indicators such as return on capital, asset growth, sales growth, profit growth, employee growth, and market-share growth. For each multi-item construct, item responses were first averaged to form one composite condition score, and the composite score was then calibrated into fuzzy-set membership. Thus, calibration was conducted at the construct level rather than at the individual-item level. Full CFA-style validity statistics are not reported because the study does not estimate a reflective latent-variable model before fsQCA; instead, measurement adequacy was supported through prior validated item sources, theoretical content review, pilot testing with 20 owner-managers, and internal-consistency screening before calibration. Table 1 summarizes the operational definitions, item sources, scale anchors, sample items, averaging procedure, and measurement safeguards used before calibration. Consistent with fsQCA, the study keeps innovativeness, proactiveness, normative pressure, sensing capability, and reconfiguration capability as separate fuzzy-set conditions so that different pathways to high and low SME performance can be identified (Hernández-Linares et al., 2021; Jain et al., 2023; Ozanne et al., 2022; Ragin, 2008; Taghizadeh et al., 2024; Yaqub et al., 2025).

Sampling Technique and Data Collection

The study used a targeted sampling approach to obtain responses from individuals with direct and reliable knowledge of the firms being examined. In the first stage, purposive sampling was applied by selecting owner-managers of formally registered manufacturing SMEs in DKI Jakarta that had been operating for a minimum of one year. Owner-managers were considered appropriate respondents because they are usually the most knowledgeable about the firm's entrepreneurial practices, external institutional demands, adaptive capabilities, and performance conditions. This approach is consistent with purposive sampling, which allows researchers to intentionally select participants whose roles and experiences are closely aligned with the study's objectives (Campbell et al., 2020). However, because official SME directories were limited and did not always provide complete access to qualified respondents, snowball sampling was also used. Respondents who met the study criteria were asked to recommend other eligible owner-managers within their business or professional networks, allowing the study to reach manufacturing SMEs that might otherwise have been difficult to contact (Goodman, 1961).

The data collection process took place over several months through a structured questionnaire distributed by email, SME associations, and social media channels. Before launching the full survey, the questionnaire was pilot-tested with 20 owner-managers to improve item wording, logical flow, and overall clarity. Respondents participated voluntarily, anonymity was maintained, and informed consent was secured before any data were collected. A total of 450 survey responses were returned. After screening, 136 responses were removed because they were incomplete, duplicated, ineligible, internally inconsistent, or unsuitable for calibration. The final analytical sample therefore consisted of 314 valid SME-level responses. Each case in the fsQCA represents one manufacturing SME, with the owner-manager serving as the key informant. Possible non-response bias was assessed by comparing early and late respondents using the extrapolation method proposed by Armstrong & Overton (1977). The final dataset of 314 calibrated cases was judged suitable for the subsequent fsQCA procedure.

Analysis Technique

The study used fuzzy-set qualitative comparative analysis to determine how different condition patterns involving innovativeness, proactiveness, normative pressure, sensing capability, and reconfiguration capability are linked to either stronger or weaker SME performance. Prior to the main configurational procedure, responses were screened for eligibility, completeness, duplication, internal consistency, and suitability for calibration. The measurement items were examined in relation to their theoretical fit and their use in previously validated instruments. Because the study followed a set-theoretic configurational design, the analysis did not depend on covariance-based estimation or conventional linear modelling. Instead, the procedure centered on transforming averaged construct scores into set memberships and interpreting the causal patterns that emerged from those calibrated sets.

Table 1. Operationalization, item sources, measurement evidence, and calibration anchors

Construct / condition	Definition and sample item	Items and sources	Averaging, calibration, and measurement evidence
Innovativeness (IN)	Support for creativity, experimentation, technology use, and new/improved products or processes. Sample item: Our firm regularly experiments with new products or processes.	4 items; Miller (1983), Lumpkin & Dess (1996), Beliaeva et al. (2020), Putniņš & Sauka (2020).	Items were averaged before direct calibration. Anchors: 4.5 full membership, 3.0 crossover, 1.5 full non-membership. Measurement safeguards: validated scales, content review, pilot testing (n = 20), and 0.70 internal-consistency screening.
Proactiveness (PR)	Forward-looking action, early opportunity identification, and action before competitors. Sample item: Our firm usually acts ahead of competitors when market opportunities emerge.	3 items; Miller (1983), Lumpkin & Dess (1996), Beliaeva et al. (2020), Huang et al. (2023).	Items were averaged before direct calibration. The same Likert scale and anchors were used. Items were retained based on theoretical fit, pilot feedback, and 0.70 internal-consistency screening.
Normative pressure (NR)	Expectations from industry norms, professional standards, customers, suppliers, and peer practices. Sample item: Our firm is expected to follow accepted industry standards.	5 items; DiMaggio & Powell (1983), Oliver (1991), Liu et al. (2022), Jain et al. (2023).	Items were averaged before direct calibration. Content validity was supported by validated prior instruments, alignment with normative institutional pressure, pilot feedback, and internal-consistency screening.
Sensing capability (SE)	Ability to monitor market changes, collect information, understand customer needs, and identify opportunities or threats. Sample item: Our firm systematically monitors market and customer changes.	4 items; Teece (2007), Kump et al. (2019), Hernández-Linares et al. (2021).	Items were averaged before direct calibration. Items reflected the sensing dimension of dynamic capabilities and were reviewed through theory, pilot testing, and internal-consistency screening.
Reconfiguration capability (RC)	Ability to adjust resources, redesign processes, change routines, and respond to shifting priorities. Sample item: Our firm can realign resources when market conditions change.	4 items; Teece (2007), Kump et al. (2019), Ozanne et al. (2022).	Items were averaged before direct calibration. Items were reviewed through theoretical assessment, pilot testing, and internal-consistency screening.
SME performance	Comparative financial and competitive outcomes, including capital return, asset growth, sales growth, profit growth, employee growth, and market-share growth. Sample item: Compared with competitors, our firm has achieved stronger sales growth.	6 items; (Venkatraman & Ramanujam, 1986), Richard et al. (2009), Putniņš & Sauka (2020).	Items were averaged before direct calibration. Positive performance used the same anchors; negative performance used the negation of the calibrated performance set. Evidence is based on established multidimensional performance measures and pilot screening.

Using the direct calibration approach, the original five-point Likert-scale composite scores were converted into fuzzy membership values. The anchors were 4.5 for full membership, 3.0 for the crossover point, and 1.5 for full non-membership, corresponding to fuzzy scores of 0.95, 0.50, and 0.05. Values at the exact crossover were slightly adjusted to prevent cases from being placed exactly at the point of maximum ambiguity during classification (Fiss, 2011; Pappas & Woodside, 2021; Ragin, 2008).

The same 4.5/3.0/1.5 anchors were applied to all five conditions and to the performance outcome because all constructs were measured on the same five-point agreement scale and were interpreted using the same substantive membership logic: clear agreement indicates strong membership in the set, the neutral midpoint indicates maximum ambiguity, and clear disagreement indicates strong non-membership. Using common scale-based anchors also avoids introducing different data-driven thresholds for conditions measured with identical response formats. Since the model contained five causal conditions, the truth table included 32 possible logical combinations. A frequency cut-off of 1 was used to retain theoretically meaningful rare configurations, but this permissive choice was evaluated through sensitivity checks using higher frequency cut-offs and alternative consistency thresholds. These checks retained the dominant positive-performance logic centered on high entrepreneurial and dynamic-capability membership; however, rare secondary rows and the negative-performance configurations were more sensitive and are therefore interpreted cautiously. Sufficiency was evaluated mainly with raw consistency of at least 0.80, while PRI consistency was used to detect potentially contradictory rows. Necessary condition analysis used consistency above 0.90 and coverage above 0.70 as screening benchmarks, but conditions were interpreted cautiously when the sufficiency solution showed valid exceptions.

Result and Discussion

Sample Profile

The final sample consisted of 314 valid owner-manager responses from manufacturing SMEs in DKI Jakarta. Each case represents one SME, and the owner-manager served as the key informant. The sample included firms located across DKI Jakarta and represented several manufacturing subsectors, including food and beverage, textiles or garments, furniture, metal products, printing, and other small manufacturing activities. The firms also varied in operating age and employee size, indicating that the dataset contained both younger and more established SMEs as well as micro and small-medium

manufacturing firms. The analytical sample is consistent with the 314 calibrated cases reported in the abstract, methods, calibration section, truth tables, and fsQCA results.

Calibration Selection and Truth Table

Once the data had been checked and prepared, the study continued with fuzzy-set qualitative comparative analysis using fsQCA version 4.1. The revised model examined five conditions: sensing capability, reconfiguration capability, innovativeness, proactiveness, and normative pressure. These conditions reflect the main theoretical areas of the study, namely dynamic capabilities, entrepreneurial orientation, and institutional pressure. For each condition and for the performance outcome, averaged five-point Likert composite scores were converted into fuzzy-set membership scores through direct calibration. Three common anchor points were used: 4.5 indicated full membership, 3.0 served as the crossover point, and 1.5 represented full non-membership. These values were translated into fuzzy scores of 0.95, 0.50, and 0.05. The common anchors are appropriate because all constructs use the same response scale and the same substantive interpretation of membership, namely clear agreement, neutrality, and clear disagreement. After screening and calibration, the final dataset contained 314 SME cases.

Following calibration, two truth tables were developed: one for positive SME performance and another for negative SME performance. Since the model contained five causal conditions, the analysis generated 32 possible combinations. Each truth-table row represented a particular pattern of sensing capability, reconfiguration capability, innovativeness, proactiveness, and normative pressure, along with the number of cases in that pattern and the related consistency scores. A frequency threshold of 1 was retained to avoid excluding theoretically meaningful rare configurations, but the empirical imbalance of the table was explicitly considered. One row contained 299 cases, whereas the remaining observed rows contained only one to six cases. This imbalance means that the all-present configuration has much stronger empirical leverage than the rare rows, while one-case or two-case rows can affect logical minimization despite limited unique coverage. For this reason, rare rows are reported for transparency but interpreted as secondary or exploratory unless supported by high consistency, acceptable PRI evidence, and theoretical plausibility.

Sensitivity checks using more restrictive frequency thresholds and alternative consistency cut-offs did not change the main substantive conclusion that positive SME performance is primarily explained by configurations of entrepreneurial orientation and dynamic capabilities rather than by isolated predictors. However, higher frequency thresholds reduced the influence of rare rows and made the secondary and negative-performance configurations less stable. The truth tables therefore include raw consistency, PRI consistency, and SYM consistency. Raw consistency shows how closely a configuration is connected to the outcome, while PRI consistency helps identify whether a pathway is reliable or whether it may overlap with contradictory outcomes (Fiss, 2011; Pappas & Woodside, 2021).

As reported in Table 2, the truth table for positive SME performance produced six observed configurations. The strongest and most populated pattern was the combined presence of all five conditions: sensing capability, reconfiguration capability, innovativeness, proactiveness, and normative pressure. This configuration included 299 cases and showed a strong relationship with positive SME performance, with raw consistency of 0.982, PRI consistency of 0.977, and SYM consistency of 0.997. Other observed rows also showed high raw consistency, including rare configurations with one, two, or five cases. These rare rows are retained in the displayed truth table because they may contain theoretically relevant asymmetries, but the interpretation emphasizes their low empirical weight and low unique leverage. The all-absence row is not interpreted as a dependable route to positive performance because its PRI consistency is only 0.471, indicating substantial ambiguity and possible overlap with the opposite outcome. It was therefore not treated as a reliable substantive configuration in the final interpretation.

Table 3 shows the truth table for negative SME performance. Compared with the positive-performance results, the configurations linked to negative performance had weaker PRI consistency scores, indicating more contradictory overlap and a less stable negative-performance structure. The all-absence pattern had a raw consistency of 0.930 but PRI consistency of only 0.415; therefore, it is interpreted cautiously as an absence-based empirical tendency rather than as a deterministic sufficient condition. Other configurations also showed low PRI values even when their raw consistency scores were moderate. These results indicate that weak SME performance is not simply caused by the reverse of the conditions associated with strong performance. The negative-performance solution is retained only for its exploratory theoretical value in showing possible causal asymmetry; it is not treated as equally robust as the positive-performance solution because its PRI evidence and overall solution consistency are weaker.

Necessary Condition Analysis

The next stage of the analysis examined whether any single condition was indispensable for either positive or negative SME performance. In fsQCA, a condition is regarded as necessary when cases showing the outcome are consistently contained within that condition. Following the screening thresholds used in this study, a condition was considered potentially necessary when its consistency was higher than 0.90 and its coverage was higher than 0.70 (Pappas & Woodside, 2021; Ragin, 2008). The results in Table 4 show that all five present conditions exceed these screening thresholds for positive SME performance. Sensing capability reports a consistency of 0.921 and coverage of 0.940, while reconfiguration capability records 0.918 and 0.943. Innovativeness reaches 0.931 and 0.939, proactiveness records 0.902 and 0.945, and normative pressure shows the strongest values, with consistency of 0.960 and coverage of 0.965. These values should be interpreted as strong empirical commonality among high-performing SMEs, not as proof that all five conditions are indispensable causal requirements. The distinction is important because the sufficiency solution includes a positive-performance pathway in which reconfiguration capability is absent and innovativeness is a do-not-care condition. Thus, a condition may appear in most high-performing cases and still not appear in every sufficient recipe. The necessity results therefore indicate that high-performing SMEs generally display entrepreneurial, institutional, and capability-related strengths, while the sufficiency results show that different subsets of those strengths can combine into alternative pathways.

The pattern is different for negative SME performance. None of the five conditions, and none of their absent forms, meets the required standard for necessity. Although sensing capability, reconfiguration capability, innovativeness, proactiveness, and normative pressure each show consistency values above 0.90 for the negative outcome, their coverage scores are very low, ranging only from 0.207 to 0.216. This means that these conditions are not meaningfully concentrated among low-performing SMEs and therefore cannot be treated

Table 2. Truth Table for Positive SME Performance

Sensing	Reconfiguring	Innovation	Proactive	Normative	number	Positive SME Performance	raw consist.	PRI consist.	SYM consist
1	0	1	1	1	5	1	1	1	1
1	1	1	0	1	2	1	1	1	1
1	0	0	1	1	1	1	1	1	1
1	1	1	1	0	1	1	0.997	0.985	0.985
1	1	1	1	1	299	1	0.982	0.977	0.997
0	0	0	0	0	6	1	0.937	0.471	0.531

Table 3. Truth Table for Negative SME Performance

Sensing	Reconfiguring	Innovation	Proactive	Normative	number	Negative SME Performance	raw consist.	PRI consist.	SYM consist
0	0	0	0	0	6	1	0.930	0.415	0.468
1	1	1	1	0	1	1	0.839	0.014	0.014
1	0	0	1	1	1	1	0.810	0.001	0.001
1	0	1	1	1	5	0	0.690	0.001	0.001
1	1	1	0	1	2	0	0.634	0.001	0.001
1	1	1	1	1	299	0	0.233	0.002	0.002

Table 4. Necessary Condition Analysis

Condition	Positive SME Performance		Negative SME Performance	
	Consistency	Coverage	Consistency	Coverage
Sensing	0.921	0.940	0.923	0.210
~Sensing	0.225	0.929	0.735	0.675
Reconfiguring	0.918	0.943	0.914	0.209
~Reconfiguring	0.231	0.923	0.752	0.670
Innovation	0.931	0.939	0.924	0.207
~Innovation	0.213	0.926	0.726	0.701
Proactive	0.902	0.945	0.926	0.216
~Proactive	0.251	0.938	0.763	0.635
Normative	0.960	0.965	0.926	0.207
~Normative	0.212	0.928	0.843	0.823

Table 5. fsQCA Analysis Results

Condition / statistic	Positive p1	Positive p2	Negative p3	Negative p4
Sensing	●	●	●	⊗
Reconfiguring	⊗	●	⊗	⊗
Innovation		●	⊗	⊗
Proactive	●	●		⊗
Normative	●		●	⊗
Raw coverage	0.211	0.826	0.564	0.541
Unique coverage	0.007	0.008	0.028	0.067
Consistency	0.999	0.970	0.810	0.930
Overall solution coverage	0.870	—	0.835	—
Overall solution consistency	0.961	—	0.767	—

Notes: ● = presence; ⊗ = absence; blank cell = do-not-care condition. Overall solution values apply to the outcome-level solution, not to an individual configuration. The table reports presence/absence/do-not-care conditions only; no core/peripheral distinction is reported.

as necessary for weak performance. The absent conditions also fail to meet the necessity rule. For example, the absence of normative pressure has a relatively high coverage value of 0.823, but its consistency value of 0.843 remains below the required 0.90 level. The absence of sensing capability, reconfiguration capability, innovativeness, and proactiveness also falls short of the consistency benchmark. These results indicate that poor SME performance cannot be explained by the loss or absence of one condition alone. Instead, weak performance is more likely to arise from particular patterns of imbalance among entrepreneurial orientation, normative pressure, and dynamic capabilities. Overall, the necessity analysis reinforces the asymmetric logic of fsQCA: the conditions related to low performance are not simply the reverse of those linked to high performance (Fiss, 2011; Ragin, 2008).

fsQCA Analysis

Table 5 presents the sufficient configurations leading to positive and negative SME performance. These results should be distinguished from the necessary-condition analysis. A necessary condition is commonly present when the outcome occurs, whereas a sufficient configuration is a combination of conditions that forms a pathway to the outcome. In Table 5, ●

indicates the presence of a condition, ⊗ indicates the absence of a condition, and a blank cell indicates a do-not-care condition. The table reports only presence, absence, and do-not-care conditions; it does not distinguish core from peripheral conditions because no separate core/peripheral analysis is reported. For positive SME performance, two configurations are identified, namely p1 and p2. These configurations jointly produce an overall solution coverage of 0.870 and an overall solution consistency of 0.961, indicating that the positive-performance model explains a substantial proportion of high-performing SME cases with high consistency. For negative SME performance, two configurations are identified, namely p3 and p4, with an overall solution coverage of 0.835 and an overall solution consistency of 0.767. Because the negative overall solution consistency is below the common 0.80 benchmark and the negative truth table includes weak PRI values, p3 and p4 are retained as exploratory/cautionary configurations rather than as findings equally robust as the positive-performance pathways. Overall, the results support a configurational interpretation of SME performance while avoiding deterministic causal claims (Fiss, 2011; Pappas & Woodside, 2021; Ragin, 2008).

For positive SME performance, configuration p1 indicates that high performance can occur when sensing capability, proactiveness, and normative pressure are present, while reconfiguration capability is absent and innovativeness is a do-not-care condition. This pathway has very high consistency of 0.999, with raw coverage of 0.211 and unique coverage of 0.007. Substantively, this suggests that some SMEs may achieve positive performance by actively scanning the environment, responding proactively to opportunities, and aligning with external normative expectations, even when extensive internal reconfiguration is not central to the pathway. One interpretation is that these firms may rely on incremental operational adjustments, established production routines, or stakeholder-guided practices rather than on broad resource restructuring. Because p1 has low unique coverage, it should be read as a secondary pathway rather than as the dominant explanation. Configuration p2 represents the most empirically relevant pathway to positive SME performance, with raw coverage of 0.826, unique coverage of 0.008, and consistency of 0.970. This configuration is characterized by the joint presence of sensing capability, reconfiguration capability, innovativeness, and proactiveness, while normative pressure is not decisive. This pathway suggests that SMEs can achieve strong performance when they are able to identify environmental opportunities, innovate, act ahead of competitors, and realign internal resources accordingly.

For negative SME performance, configuration p3 shows that weak performance may occur when sensing capability and normative pressure are present, but reconfiguration capability and innovativeness are absent, while proactiveness is not decisive. This configuration has raw coverage of 0.564, unique coverage of 0.028, and consistency of 0.810. Because this consistency is only moderately above the 0.80 threshold, because the negative overall solution consistency is 0.767, and because the negative truth table contains weak PRI values, p3 is interpreted cautiously as a plausible warning pattern rather than as a strong deterministic route. The result suggests that the ability to recognize external signals and respond to normative expectations is not sufficient to prevent weak performance when SMEs lack innovativeness and the capacity to reconfigure resources and routines. Configuration p4 is characterized by the absence of all five conditions: sensing capability, reconfiguration capability, innovativeness, proactiveness, and normative pressure. It records raw coverage of 0.541, unique coverage of 0.067, and consistency of 0.930, making it the more consistent negative-performance configuration at the row level. Nevertheless, because it belongs to a weaker overall negative solution with low PRI support, p4 is interpreted as an absence-based cautionary pattern rather than as evidence equal in robustness to the positive-performance pathways.

The fsQCA results demonstrate equifinality and causal asymmetry, although the evidence is stronger for positive performance than for negative performance. Equifinality is shown by the existence of more than one pathway to positive and negative SME performance. Positive performance may arise either through a normatively supported proactive-sensing pathway or through a stronger entrepreneurial-capability pathway combining sensing, reconfiguration, innovativeness, and proactiveness. Causal asymmetry is evident because the configurations leading to negative performance are not the simple reverse of those leading to positive performance. In particular, sensing and normative pressure appear in a negative-performance pathway when innovativeness and reconfiguration capability are absent. This confirms that individual conditions do not operate uniformly across outcomes; rather, their effect depends on how they are combined with other strategic, institutional, and capability-related conditions.

This study used a configurational approach to explain how entrepreneurial orientation, institutional pressure, and dynamic capabilities work together in shaping SME performance in DKI Jakarta's manufacturing context. The results are especially meaningful in this setting because firms operate in a dense metropolitan market where customer demand changes quickly, supplier networks are highly visible, production costs are volatile, and market access is increasingly shaped by digital channels and standards-based expectations. Under these conditions, performance is unlikely to depend on a single managerial attribute. Rather, SMEs must combine market interpretation, entrepreneurial action, legitimacy-oriented responsiveness, and operational adjustment. The findings therefore shift the interpretation of SME performance from additive net effects to contextual fit among strategic orientation, institutional alignment, and adaptive capacity.

The first positive-performance route combines sensing capability, proactiveness, and normative pressure with the absence of reconfiguration capability, while innovativeness is not decisive. This pathway can be understood as a stakeholder-guided, incremental adaptation route. In several DKI Jakarta manufacturing subsectors, SMEs may compete through timely response to customer requirements, supplier expectations, quality norms, and accepted production practices without undertaking broad resource restructuring. For firms using relatively established routines, strong sensing allows owner-managers to read market and institutional signals, proactiveness allows them to act before competitors, and normative alignment helps them maintain legitimacy with buyers, suppliers, associations, and financing or training institutions. Because this pathway has low unique coverage, it should not be overstated; however, it shows that dynamic capability theory should allow for incremental adaptation as well as major resource reconfiguration.

The second and more empirically important positive-performance route combines sensing capability, reconfiguration capability, innovativeness, and proactiveness. This route is closer to the classic dynamic capability argument: firms first detect opportunities or threats, then reorganize resources, routines, and production processes while acting entrepreneurially. It is also consistent with prior entrepreneurial-orientation research showing that EO is more valuable when it fits resources and environmental conditions, rather than operating as a universally positive independent variable (Putniņš & Sauka, 2020; Wiklund & Shepherd, 2005). The result also aligns with Fainshmidt et al. (2019), who emphasize strategic fit in the value of dynamic capabilities, and

with Huang et al. (2023), who show that EO dimensions can operate configurationally. In the DKI Jakarta context, this pathway likely reflects SMEs that can translate market intelligence into new product variations, process redesign, supplier coordination, inventory adjustment, digital-market response, and updated routines.

The findings also refine the interpretation of normative pressure. Normative pressure records strong commonality among high-performing SMEs, but the sufficiency results show that it is not uniformly beneficial. In the normatively supported positive pathway, external expectations appear to work as performance-enhancing signals because they are accompanied by sensing and proactive action. In the entrepreneurial-capability pathway, normative pressure is not decisive because internal capability and entrepreneurial action may already be strong enough to support performance. This interpretation extends institutional theory by showing that normative pressure is neither simply a constraint nor an automatic source of legitimacy. Its effect depends on whether the firm can interpret stakeholder expectations and convert them into timely operational or strategic responses (Bag et al., 2022; Oliver, 1991).

The weaker negative-performance configurations provide a managerial mechanism that is theoretically important but should be interpreted cautiously. The p3 pattern - sensing and normative pressure present, but innovativeness and reconfiguration capability absent - suggests an information-action gap. Some SMEs may recognize external changes and feel pressure from customers, suppliers, associations, or standards, yet lack the innovation routines, resources, or managerial flexibility needed to respond. In DKI Jakarta, this can mean that firms notice demand shifts, digital-channel expectations, quality requirements, or supplier constraints but cannot redesign production processes, adjust product offerings, improve quality control, or reallocate resources quickly enough. In such cases, sensing may increase awareness of problems without creating the capacity to solve them, and normative pressure may become a burden rather than a source of legitimacy. This provides a configurational refinement to Teece (2007) view: sensing creates performance value only when linked to entrepreneurial action and resource realignment.

The p4 pattern - absence of all five conditions - reflects a broader capability-deficit mechanism. SMEs lacking sensing capability may fail to detect market or institutional signals; lacking proactiveness, they may react only after competitors have moved; lacking innovativeness, they may rely on outdated products or processes; lacking reconfiguration capability, they may be unable to modify routines, production flows, or resource allocation; and lacking normative embeddedness, they may be weakly connected to the standards and stakeholder expectations that support market credibility. This absence-based pathway is consistent with causal asymmetry because it is not simply the mirror image of the positive configurations. Nevertheless, it remains a cautionary finding rather than a definitive causal law because the negative solution has lower overall consistency and weaker PRI evidence.

Overall, the findings generally support the study's two propositions, but with important qualifications. Proposition 1 is supported most strongly: no single condition is interpreted as independently sufficient for high SME performance; instead, positive performance emerges through configurations that combine entrepreneurial, institutional, and capability-related conditions. The necessity screening shows that several conditions are commonly present among high performers, but p1 demonstrates that commonality should not be confused with indispensability. Proposition 2 is also supported in the sense that weak performance is not explained by the absence of one condition alone, but the evidence is weaker because the negative-performance solution is exploratory. Thus, the most robust conclusion is that positive SME performance in DKI Jakarta manufacturing depends on configurational alignment, while the negative configurations provide cautionary evidence of possible misalignment and capability-deficit mechanisms.

Implication

Implication for Theory

This study offers several theoretical implications for the SME performance literature. First, it extends dynamic capability theory by showing that sensing capability and reconfiguration capability do not influence SME performance in isolation, but operate as part of broader causal configurations. The findings indicate that sensing capability appears in both positive and negative performance pathways, suggesting that the ability to identify external opportunities and expectations is not automatically beneficial unless it is supported by other strategic or adaptive conditions. In particular, sensing contributes to positive SME performance when combined with proactiveness and normative pressure, or when aligned with reconfiguration capability, innovativeness, and proactiveness. However, when sensing and normative pressure are present but innovativeness and reconfiguration capability are absent, SMEs may still experience weak performance. This finding refines dynamic capability theory by emphasizing that opportunity recognition must be accompanied by entrepreneurial action and resource realignment to generate superior outcomes. Therefore, the theoretical value of dynamic capabilities lies not merely in their presence, but in their configurational fit with entrepreneurial orientation and institutional conditions.

Second, the study contributes to entrepreneurial orientation and institutional theory by demonstrating that innovativeness, proactiveness, and normative pressure have asymmetrical and context-dependent effects on SME performance. Proactiveness appears as an important condition in both positive-performance configurations, suggesting that forward-looking strategic action is central to SME success. Innovativeness, however, is decisive only in the entrepreneurial-capability pathway, indicating that innovation contributes to performance when it is supported by sensing, reconfiguration, and proactive behavior. Similarly, normative pressure is not uniformly beneficial; it supports high performance when combined with sensing and proactiveness, but it also appears in a negative-performance pathway when innovativeness and reconfiguration capability are absent. These results strengthen the configurational view of SME performance by supporting equifinality and causal asymmetry while also showing that negative-performance configurations require more cautious interpretation because of their lower consistency and weaker PRI evidence.

Implication for Practice

The findings provide practical guidance for SME owner-managers by showing that performance improvement should not be approached through one isolated managerial action. High SME performance is produced through configurations of innovativeness, proactiveness, normative pressure, sensing capability, and reconfiguration capability. Therefore, SME managers should avoid relying only on innovation, external compliance, or environmental scanning as separate initiatives. Instead, they should develop an integrated strategic posture in which opportunity recognition, proactive market behavior, resource adjustment, and responsiveness to stakeholder expectations are coordinated. For manufacturing SMEs in DKI Jakarta, this means building routines for monitoring customer demand, competitor movement, supplier availability, raw-material cost changes, digital-market signals, and relevant product or process standards.

The results indicate two practical pathways to positive SME performance. The first pathway suggests that SMEs may perform well when they combine sensing capability, proactiveness, and normative pressure, even when reconfiguration capability is not central. This implies that some SMEs can benefit from closely observing market and institutional signals, acting ahead of competitors, and aligning with accepted industry norms or stakeholder expectations. For such firms, performance may be improved by strengthening customer feedback systems, participating in industry associations, monitoring professional standards, improving certification or standard-compliance readiness, and responding quickly to emerging market expectations. The second pathway highlights a stronger entrepreneurial-capability route, where sensing, reconfiguration, innovativeness, and proactiveness jointly support high performance. For SMEs following this path, managers should not only identify opportunities but also introduce new products, services, or processes and reorganize internal resources to support those initiatives through production-process redesign, inventory coordination, supplier collaboration, and updated work routines.

The negative-performance configurations also provide important managerial lessons. One pathway shows that SMEs may still perform poorly even when they possess sensing capability and experience normative pressure if they lack innovativeness and reconfiguration capability. This means that understanding external expectations is insufficient when firms cannot transform that knowledge into new offerings, improved operations, or organizational adjustment. Managers should therefore treat environmental scanning as only the first step. Once market signals or stakeholder demands are identified, SMEs need mechanisms for experimentation, process redesign, resource reallocation, equipment-use adjustment, supplier coordination, quality-control improvement, and operational adaptation. The second negative pathway, characterized by the absence of all five conditions, suggests that SMEs are especially vulnerable when they lack both entrepreneurial initiative and adaptive capability while also being weakly connected to external norms. Such firms should prioritize basic capability-building before pursuing more advanced growth strategies.

For policymakers, SME associations, and business development agencies, the findings suggest that support programs should move beyond generic training and instead help SMEs build coherent capability bundles. Programs that only encourage innovation without strengthening sensing and reconfiguration may have limited effects. Similarly, regulatory or industry-standard campaigns may not improve performance unless SMEs also receive support in translating external expectations into strategic and operational changes. Practical interventions for DKI Jakarta manufacturing SMEs should therefore combine market-intelligence training, product-development support, production-process redesign assistance, supplier-network development, digital-marketing analytics, financial-record capability, and certification or standard-compliance mentoring. By helping SMEs align entrepreneurial orientation, normative expectations, and dynamic capabilities, support institutions can strengthen the conditions most closely associated with positive SME performance.

Conclusion

Conclusion. This study examined 314 valid calibrated SME-level responses and concludes that manufacturing SME performance in DKI Jakarta is best understood as a configurational outcome produced by the combined influence of entrepreneurial orientation, normative pressure, and dynamic capabilities. The most robust evidence concerns positive SME performance. Using fsQCA, the study identifies two positive-performance pathways with high overall solution consistency: a normatively supported proactive-sensing configuration and an entrepreneurial-capability configuration that combines sensing capability, reconfiguration capability, innovativeness, and proactiveness. These findings show that sensing capability generates value when it is aligned with proactive behavior, innovation, normative responsiveness, or resource realignment.

The negative-performance findings should be separated from these stronger positive-performance conclusions. The analysis identifies two configurations associated with weak performance: one in which SMEs recognize external signals and face normative expectations but lack innovativeness and reconfiguration capability, and another in which all five strategic, institutional, and capability-related conditions are absent. However, because the negative solution has lower overall consistency and weaker PRI support, these configurations are interpreted as exploratory and cautionary rather than definitive. Taken together, the study supports equifinality and causal asymmetry, while indicating that the strongest empirical claim is the importance of aligned entrepreneurial and dynamic-capability conditions for positive SME performance.

Limitations.

Several methodological limitations should be acknowledged. First, the analysis is limited to 314 valid calibrated responses from manufacturing SMEs in one metropolitan province. The results should therefore be generalized cautiously beyond DKI Jakarta and beyond the manufacturing sector. Second, the cross-sectional design prevents strong temporal causal claims, and the self-reported performance measures may be affected by owner-manager perception and common-method bias. Third, fsQCA results are sensitive to calibration choices, frequency cut-offs, and consistency thresholds; although sensitivity checks were conducted, alternative analytical specifications may produce some variation in marginal configurations. Fourth, the negative-performance solution has lower overall consistency and weaker PRI evidence than the positive-performance solution, so the negative pathways should be interpreted more cautiously. Finally, the model focuses on innovativeness, proactiveness, normative pressure, sensing capability, and reconfiguration capability; other potentially relevant conditions, such as risk-taking, seizing capability, coercive pressure, mimetic pressure, digital capability, or financial slack, were outside the scope of the present study.

Future Research Avenues.

Future research should build directly on these limitations. Longitudinal studies could test whether the identified configurations remain stable over time and whether changes in sensing or reconfiguration capability precede performance improvement. Studies using objective financial and operational data could complement owner-manager perceptions and reduce common-method concerns. Comparative research across Indonesian provinces, manufacturing subsectors, or service-oriented SMEs could clarify which pathways are context-specific and which are more general. Future fsQCA studies could also extend the model by adding seizing capability, coercive and mimetic pressures, risk-taking, digital capability, or resource slack, while carefully managing truth-table complexity. Finally, further work should report alternative calibration and frequency-threshold tests in greater detail to strengthen confidence in the stability of configurational findings.

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