The role of customer orientation in enhancing the innovation capability and performance of Moroccan SMEs: A structural equation approach

Yassin Allammari | Chama Jaride | Mohamed Azdod | Ahmed Taqi

Abstract The academic literature provides substantial evidence that customer orientation and innovation capability directly enhance the performance of SMEs. However, there is a gap in understanding the potential synergies between customer orientation and innovation capability within SMEs. This paper aims to explore how these two variables interact to influence the overall performance of SMEs. To achieve this, a quantitative survey was conducted with 98 managers of Moroccan SMEs operating in diverse sectors, including manufacturing, services, and commerce. The collected data were analyzed in two steps. First, an exploratory factor analysis was performed using "SPSS" to identify the underlying dimensions of the studied variables. Then, a confirmatory analysis using partial least squares structural equation modeling (PLS-SEM) with "SmartPLS 4" was conducted to test the research hypotheses and validate the proposed relationships between the variables. The findings of this study revealed that the development of customer orientation positively and directly impacts the performance of Moroccan SMEs, enhancing their ability to meet customer needs and expectations more effectively. Additionally, innovation capability was found to partially mediate this relationship, indicating that customer orientation stimulates innovation, which in turn improves SME performance. These findings have important managerial and theoretical implications. They suggest that SME managers should invest in customer-centric strategies and encourage innovation within their organizations to improve performance. Furthermore, these results enrich our understanding of the dynamics between customer orientation, innovation, and SME performance, underscoring the importance of considering these two variables together to enhance SME performance.

Keywords: customer orientation, innovation capability, Moroccan SMEs, performance, structural equations

1. Introduction

The context of Moroccan SMEs is constantly evolving, shaped by increasing globalization and the imperative to adopt adopt competitive strategies to consolidate their position in the market (Allammari et al., 2024). Customer orientation and innovation capability emerge as key managerial practices that can enhance SMEs' competitiveness and performance (Bamfo & Kraa, 2019; D'souza et al., 2022; Fidel et al., 2018).

Customer orientation, defined as a company's ability to understand and respond to the changing needs and expectations of its customers (Narver & Slater, 1990), has long been recognized as a crucial driver of customer satisfaction and long-term loyalty (Ismail, 2023; Srivastava et al., 2023; Varadarajan, 2020; Woehler & Ernst, 2023). Simultaneously, the ability to innovate has become a driving force for growth and competitiveness, enabling SMEs to introduce new ideas, products, and processes to adapt to market challenges (Aburayya et al., 2020; Domi et al., 2020; R. P. Lee & Wei, 2023).

However, a gap exists in understanding the potential synergies between customer orientation and innovation capability within Moroccan SMEs. This study aims to explore how these two variables interact to influence SME performance for their customers.

The literature has highlighted that market orientation (with customer orientation being one of its main dimensions) promotes the development of innovation capability, which in turn contributes to the improvement of SME performance (D'souza et al., 2022; Han et al., 1998; Ho et al., 2018; Keskin, 2006; Kolbe et al., 2022; Prifti & Alimehmeti, 2017). However, few studies have attempted to analyze the specific mediating effect of customer orientation on this relationship (e.g., Abdulrab et al., 2022, Ismail (2023) and Lee & Wei (2023)).

Thus, this study aims to make three important contributions to the literature. First, it explores in detail how customer orientation and innovation capability interact to improve SME performance. Second, it enriches existing academic research by highlighting the mediating role of innovation capability in the relationship between customer orientation and the performance
of Moroccan SMEs. Finally, this study will be the first of its kind in the Moroccan context, providing key insights for decision-makers and practitioners to foster a customer- and innovation-focused organizational culture.

From this perspective, the present study will attempt to answer the following main research question: “To what extent does customer orientation impact the performance of Moroccan SMEs, taking into account the mediating role of innovation capability?” In other words, how can attention to customer needs not only catalyze immediate performance improvement but also stimulate innovation capability, which in turn positively influences overall SME performance?

To address this research question, we will adopt a methodology based on a positivist stance with a hypothetico-deductive approach. Thus, a quantitative survey was conducted with 98 managers of Moroccan SMEs who were carefully selected to ensure adequate representativeness. Subsequently, the collected data were analyzed using two statistical methods, the first based on exploratory factor analysis using SPSS software and the second based on confirmatory analysis using the structural equation modeling approach in Smart-Pls 4.0 software. The objective is to evaluate the relationships between customer orientation, innovation capability, and SME performance.

To inform our analysis, we begin by conducting a theoretical literature review on the three fundamental concepts of our model (customer orientation, innovation capability, and performance). Second, we will detail the methodological steps undertaken in this study. Subsequently, we will proceed with formulating the research hypotheses and specifying the conceptual model. Finally, we will present and discuss the obtained results, thereby providing a better understanding of the complex dynamics between customer orientation, innovation capability, and the performance of Moroccan SMEs in the specific context explored.

2. Literature review and development of hypotheses

2.1. The resource-based view (Barney, 1991)

To frame the various causal links between the three concepts in question, the resource-based theory is most suitable. According to this theory, strategic orientations such as customer orientation and innovation capability can be considered intangible resources and unique capabilities that are difficult to imitate (Appiah-Adu & Singh, 1998; Ellis, 2005). These resources enable the firm to differentiate itself from competitors, gain a competitive advantage, and create value (Mathafena & Msimango-Galawe, 2023; Morgan & Strong, 1998). This contributes to the overall improvement of firm performance (Grissmann et al., 2013; Hult et al., 2005).

Thus, resource-based theory provides a solid conceptual framework for understanding how the integration of customer orientation and innovation capability can positively influence the performance of Moroccan SMEs.

2.2. Customer Orientation and SME Performance

The concept of “customer orientation” is one of the three main components of market orientation conceptualized by Naver & Slater (1990). It reflects the overall effort of the organization to create superior value for the customer (Gallarza et al., 2023). Recent literature has placed great importance on studying customer orientation due to its significant influence on SME performance. It is perceived as an organizational culture that takes into account the current and future needs and desires of customers and continuously contributes to value creation (Naver & Slater, 1990, p. 21).

In this sense, customer-oriented companies leverage information related to the requirements and desires of current and future customers to offer high-value propositions (Gafa, 2023). Thus, this orientation allows the company to share customer information with all employees, constantly providing opportunities to serve them well (Conduit & Mavondo, 2001). Furthermore, companies must understand the value chain of their customers to continuously create superior value for them (Narver & Slater, 1990), thereby enhancing their performance. By focusing on creating value for customers, a company can improve customer satisfaction and loyalty, as well as innovation capability and performance (Haines, 2022).

In the current research, the link between customer orientation and the performance of SMEs is a determining factor in their sustainable success (Ismail, 2023; Varadarajan, 2020). Thus, customer orientation, which encompasses a company’s ability to anticipate, understand, and proactively respond to the changing needs of its customers, has emerged as a crucial catalyst for SME performance (Woehler & Ernst, 2023).

Moreover, SMEs that adopt a strong customer orientation demonstrate an increased propensity to establish loyal and enduring relationships with their customer base (Zhao et al., 2023). This focus on customer satisfaction and experience generates multiple benefits, such as increased customer retention, high recommendation rates, and greater flexibility to adapt to market changes (Srivastava et al., 2023). As a result, these SMEs enjoy improved performance, manifested in revenue growth, increased profitability, and a strengthened competitive position (Varadarajan, 2020).

Thus, the presence of a positive impact between customer orientation and SME performance asserts itself as an undeniable truth, placing this relationship at the very core of entrepreneurial success strategies (Sa et al., 2020). Furthermore, it is important to note that the increased proximity of SMEs to their customers, coupled with lower organizational costs compared to their larger counterparts, confers agility that can facilitate quick and tailored responses to customer requirements (C. M. J. Lee et al., 2021; Maurya et al., 2015).
Numerous previous studies have established a significant and strong relationship between customer orientation and SME performance. For example, the findings of Ismail (2023) revealed that customer orientation positively and significantly affects customer loyalty, thereby improving overall performance. Similarly, Aburayya et al. (2020), in their study in Dubai on a sample of 205 SMEs, demonstrated that customer orientation is positively correlated with the customer satisfaction, loyalty, and financial performance of SMEs.

Recently, Lee & Wei (2023) demonstrated in their study on a sample of 180 Chinese SMEs that adopting a customer orientation positively influences business and financial performance. Furthermore, Abdulrab et al. (2022a) revealed a positive and significant relationship between customer orientation and performance in the context of SMEs in the Kingdom of Saudi Arabia. Therefore, considering the above, we can formulate our first hypothesis:

Hypothesis (H1): Customer orientation positively and directly influences the performance of Moroccan SMEs.

2.3. The mediating role of innovation capability

Innovation is a multifaceted and evolving concept used across different contexts with varying interpretations (Baregheh et al., 2009). It commonly entails elements such as creativity, originality, and value generation (Wikhamn, 2019) and is recognized as a crucial factor in driving sustained business performance (Naranjo-Valencia et al., 2016).

Although various types of innovation are delineated in the innovation literature (e.g., radical and incremental innovation, product and process innovation, and marketing and managerial innovation), recent research often dissects the innovation concept into two distinct dimensions: "innovation" and "innovation capability" (Carrasco-Carvajal et al., 2023; Otache & Usang, 2022).

The capacity for innovation refers to an organization’s ability to generate, develop, and implement new ideas, products, processes, or services effectively and continuously (Hurtado-Palomino et al., 2022; Otache & Usang, 2022; Tutar et al., 2015). It encompasses not only the ability to design innovations but also the ability to successfully put them into practice in the market (Carrasco-Carvajal et al., 2023; Mariani et al., 2023; Naveed et al., 2023). This capacity often involves creativity, research, development, knowledge management, and the ability to adapt and respond quickly to market changes and challenges (Pillon & Louis, 2022; Sturm et al., 2023; Tosheva & Abdullaeva, 2022).

Although there is ample evidence of the benefits of customer orientation and innovation capacity on SME performance, the literature has sought to study how these factors may influence this performance. According to this study, it can be expected that innovation capacity mediates the relationship between customer orientation and SME performance. This is mainly explained by the fact that by integrating innovative initiatives such as adapting products to evolving customer needs and implementing research and development-focused strategies, SMEs can strengthen their level of engagement with their customers (Fidel et al., 2018). This approach results in a significant improvement in both customer satisfaction and loyalty, thus leading to an overall improvement in company performance (Pekovic et al., 2016).

Recently, empirical studies have demonstrated the existence of a mediating effect of innovation on the relationship between customer orientation and SME performance. For example, D’souza et al. (2022) revealed in their study in Indonesia on a sample of 309 SMEs that innovation capacity partially mediates the relationship between customer orientation and the financial and nonfinancial performance of these companies.

Similarly, the results of the study by Fidel et al. (2018) on a sample of 210 Spanish SMEs show that innovation capacity has a mediating effect and is considered an important strategic resource for developing the innovative practices and marketing performance of SMEs.

Furthermore, a study by Bamfo & Kraa (2019) conducted on a sample of 500 SMEs in Ghana showed that customer orientation positively and significantly predicts performance and that innovation capacity partially mediates this relationship.

Another study conducted in Turkey by Zehir et al. (2015) with 474 managers of SMEs operating in the manufacturing sector revealed that innovation capacity has a partial mediating effect on the link between customer orientation and the commercial and financial performance of these SMEs.

In light of the above discussions, we can formulate the following research hypotheses:

Hypothesis H2: Adopting a customer orientation promotes the development of innovation capacity in Moroccan SMEs.

Hypothesis H3: Innovation capacity has a positive and significant impact on the performance of Moroccan SMEs.

Hypothesis H4: Innovation capacity mediates the relationship between customer orientation and the performance of Moroccan SMEs.

2.4. Conceptual research model

After formulating the research hypotheses, we can establish our conceptual research model (Figure 1).
3. Methodology

3.1. Research Settings and Data Collection

To explore the link between customer orientation, innovation capability, and performance among Moroccan SMEs, this research employed a methodology grounded in a positivist epistemological stance utilizing a hypothetico-deductive approach.

Sampling for our study was carried out using a nonprobabilistic convenience sampling technique, where respondents were chosen based on their availability and accessibility. We chose this method for its expediency and effectiveness in swiftly accessing participating SMEs for our research.

Our sample comprises 98 Moroccan SMEs spanning various sectors, such as industry, services, technology, trade, and others, ensuring a comprehensive representation of different sectors. SME leaders were invited to participate in our study through an electronic questionnaire. Additionally, to collect data from these leaders, this questionnaire contained questions and statements developed on a 5-point Likert scale ranging from "Strongly Disagree (1)" to "Strongly Agree (5)".

For the data analysis, exploratory factor analysis was initially applied within the SPSS software, after which measurement indicators exhibiting low factor loadings were excluded. Structural equation modeling (SEM) emerged as the primary tool utilized to estimate the model and examine the research hypotheses. This decision was made based on several foundational considerations. First, SEM is notably well suited for investigations with limited sample sizes, a characteristic frequently encountered in SME research. Additionally, it facilitates the effective modeling of intricate relationships between latent variables and their corresponding measurement indicators, a common occurrence in the realms of social sciences and management. Furthermore, SEM offers significant flexibility in model specification and can be tailored to address the specific requirements of the research, such as simultaneous testing of mediation and moderation effects.

3.2. Measurement

For the measurement of variables, the study opted to use measurement scales borrowed from specialized literature that have been validated for their reliability. Thus, for the independent variable "Customer Orientation," we retained the measurement scales derived from the work of Naver & Slater (1990), consisting of five items ($\alpha = 0.864$).

Innovation capability was measured by considering six items ($\alpha = 0.880$) borrowed from the works of Calantone et al. (2002), Keskin (2006), Lin et al. (2008).

Finally, the performance of SMEs was measured by considering six subjective indicators ($\alpha = 0.870$) adopted by Calantone et al. (2002), Keskin (2006), Lin et al. (2008). The measurement of these items is based on the assessment of leaders regarding competition: market share growth, sales, return on investment, profit margin, customer satisfaction, and customer loyalty.

4. Results

The data analysis procedure unfolded in two distinct phases. First, an initial exploration through exploratory factor analysis was performed using SPSS software (version 21.0). Then, subsequent validation through confirmatory factor analysis was carried out using the structural equation modeling method with Smart PLS software (version 4.0).
4.1. Exploratory factor analysis: Purification of measurement scales

To corroborate this analysis, we adopted a principal component analysis (PCA) approach with varimax rotation. In this process, all the elements included in the initial model were subjected to a battery of criteria requiring thorough evaluation. Among these criteria were factorization, dimensionality, element structuring, and reliability (Table 1).

Table 1 Results of factor analysis and reliability in SPSS.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Items</th>
<th>Cronbach's Alpha</th>
<th>Explained Variance</th>
<th>KMO Index</th>
<th>Bartlett's Test (5%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Orientation</td>
<td>CO1</td>
<td>0.84</td>
<td>65.14%</td>
<td>0.861</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>CO2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CO3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CO4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CO5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Innovation capability</td>
<td>IC1</td>
<td>0.85</td>
<td>73.02%</td>
<td>0.697</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>IC2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IC3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IC4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IC5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>IC6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performance SME</td>
<td>Perf1</td>
<td>0.86</td>
<td>67.79%</td>
<td>0.691</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>Perf2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Perf3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Perf4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Perf5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Perf6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The main results presented in the table indicate that all selected indicators have a factor contribution greater than 0.70. Furthermore, for each of the explanatory variables and the variables to be explained in our model, the KMO index provides satisfactory results, and the results of Bartlett's sphericity test are significant, suggesting that the data have an exploitable factorial structure. Following this phase of exploratory analysis, we can conclude that the three variables in question (customer orientation, innovation capability, and SME performance) are unidimensional.

4.2. Confirmatory analysis based on structural equations (PLS-SEM).

After conducting an exploratory factor analysis on SPSS, we performed a confirmatory analysis on Smart PLS to test the research hypotheses.

4.2.1. Reliability test of the measurement model (internal validity)

Based on the works of Chin (1998), the "Loadings" test of the different items should extract results higher than 0.707. Therefore, the measurement indicators of the estimated model that have "loads" below this threshold should be eliminated (Table 2).

Table 2 Analysis of the reliability of the measurement model.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Items</th>
<th>Loadings</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer orientation</td>
<td>CO1</td>
<td>0.755</td>
<td>0.864</td>
</tr>
<tr>
<td></td>
<td>CO2</td>
<td>0.827</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CO3</td>
<td>0.833</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CO4</td>
<td>0.830</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CO5</td>
<td>0.778</td>
<td></td>
</tr>
<tr>
<td>Innovation capability</td>
<td>IC1</td>
<td>0.717</td>
<td>0.880</td>
</tr>
<tr>
<td></td>
<td>IC2</td>
<td>0.754</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IC3</td>
<td>0.860</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IC4</td>
<td>0.868</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IC5</td>
<td>0.810</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IC6</td>
<td>0.734</td>
<td></td>
</tr>
<tr>
<td>Performance SME</td>
<td>Perf1</td>
<td>0.760</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Perf2</td>
<td>0.749</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Perf3</td>
<td>0.769</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Perf4</td>
<td>0.850</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Perf5</td>
<td>0.854</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Perf6</td>
<td>0.757</td>
<td></td>
</tr>
</tbody>
</table>
According to the results of the Path, we observe that all the items constructing the measurement models have loadings greater than 0.707. Additionally, the three latent variables exhibited a Cronbach’s alpha greater than 0.7. Therefore, the reliability of the measurement model is considered relevant (Figure 2).

**Figure 2** Structural equation model.

4.2.2. Construct validity test

The construct validity test is generally conducted in two steps: the convergent validity test and the discriminant validity test.

4.2.2.1. Convergent validity

The convergent validity of our model is evaluated by analyzing the factor contribution (factor loadings) of each item to its latent variable. This evaluation includes calculating the average variance extracted (AVE) between the construct and its measurement variables. The measures traditionally used to assess convergent validity, such as Cronbach’s alpha and Rho_A, show similar results. According to the recommendations of Nunnally (1978) and Hair et al. (2019), a threshold of 0.7 for composite reliability is often considered indicative of “moderate” reliability, a standard frequently adopted in previous research. The results are summarized in Table 3 below.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Cronbach’s alpha</th>
<th>Composite reliability</th>
<th>Average variance extracted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer orientation</td>
<td>0.864</td>
<td>0.864</td>
<td>0.648</td>
</tr>
<tr>
<td>Innovation capability</td>
<td>0.880</td>
<td>0.886</td>
<td>0.628</td>
</tr>
<tr>
<td>Customer performance</td>
<td>0.870</td>
<td>0.884</td>
<td>0.626</td>
</tr>
</tbody>
</table>

The obtained results show that the values of the reliability indicators are above 0.7 and that the value of the average variance extracted (AVE) for each latent variable is above 0.5. Therefore, convergent validity exhibits satisfactory significance (Hair et al., 2019).

4.2.2.2. Discriminant validity

The second phase of construct validity analysis is discriminant validity. Indeed, according to the Fornell & Larcker (1981), a measurement model respects discriminant validity if each latent variable shares and explains the variance of its own indicators better than the variance of other constructs. The execution of Path allowed us to obtain the following results (Table 4):

<table>
<thead>
<tr>
<th>Variables</th>
<th>Customer orientation</th>
<th>Innovation capability</th>
<th>SME performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer orientation</td>
<td>0.805</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Innovation capability</td>
<td>0.522</td>
<td>0.793</td>
<td></td>
</tr>
<tr>
<td>SME performance</td>
<td>0.683</td>
<td>0.627</td>
<td>0.791</td>
</tr>
</tbody>
</table>

By examining the results presented in the table, it was revealed that the square roots of the diagonal AVEs of each latent variable are greater than the correlations between different constructs located outside the diagonals. This demonstrates that
the measurement scales of each latent variable contribute to better explaining their specific latent variable but less to explaining the other variables in the model. In conclusion, it is possible to affirm that our measurement model satisfies the second criterion of discriminant validity.

4.2.3. Analysis of the structural model and hypothesis verification

The assessment of the structural model proceeds through two separate phases. Initially, the first phase entails validating the model's quality and predictive capability. This assessment encompasses four crucial indicators: the coefficient of determination $R^2$, the goodness of fit (GOF), the effect size $f^2$, and the predictive relevance $Q^2$ (Hair et al., 2019). Subsequently, the second phase of structural model evaluation entails testing the research hypotheses utilizing the $P$ value indicator (Hair et al., 2019).

4.2.3.1. Evaluation of the model's goodness of fit (GOF)

Tenenhaus et al. (2005) suggest using the GOF index to evaluate the goodness of fit of the model. They proposed that a GOF value exceeding 30% is necessary for the model to be deemed relevant. The results obtained show a GOF of 51.72%, which exceeds the recommended threshold. Hence, the quality of the connections between the latent variables (structural model) and between each latent variable and its measurement indicators (measurement model) is considered satisfactory and pertinent.

4.2.3.2. The coefficient of determination $R^2$

The coefficient of determination $R^2$, presented in Table 5, reveals that our model lacks non-significant or weak $R^2$ values. Specifically, the "Customer orientation" variable explains approximately 27.3% of the variance in the "Innovation capability" variable, while the combined influence of "Customer orientation and innovation capability" accounts for 56.7% of the variance in the "SME performance" variable. Consequently, we can infer that the independent variables within our model significantly contribute to predicting the dependent variables.

<table>
<thead>
<tr>
<th>Links</th>
<th>AVE</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer orientation</td>
<td>0.648</td>
<td>-----</td>
</tr>
<tr>
<td>Innovation capability</td>
<td>0.628</td>
<td>0.273</td>
</tr>
<tr>
<td>SME performance</td>
<td>0.626</td>
<td>0.567</td>
</tr>
<tr>
<td>Sum</td>
<td>1.902</td>
<td>0.84</td>
</tr>
<tr>
<td>Mean</td>
<td>0.634</td>
<td>0.422</td>
</tr>
<tr>
<td>GOF = $\sqrt{0.634 \times 0.422} = 0.5172$</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4.2.3.3. The effect size $f^2$

The $f$-square allows the size of the influence of the independent variable on the dependent variable to be evaluated. According to Cohen (1992), if $f^2$ is greater than 0.35, the effect is large; if its value is between 0.15 and 0.35, it is small if its value is between 0.02 and 0.15, and it is null if its value is less than 0.02 (Table 6).

<table>
<thead>
<tr>
<th>Links</th>
<th>$f$-square</th>
<th>Effect size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer orientation -&gt; SME performance</td>
<td>0.402</td>
<td>Large</td>
</tr>
<tr>
<td>Customer orientation -&gt; Innovation capability</td>
<td>0.375</td>
<td>Large</td>
</tr>
<tr>
<td>Innovation capability -&gt; Performance</td>
<td>0.231</td>
<td>Medium</td>
</tr>
</tbody>
</table>

These results indicate that the direct effect of customer orientation on the performance of Moroccan SMEs is weak. However, with the introduction of the "innovation capability" variable, the indirect effect of customer orientation on performance becomes significant.

4.2.3.4. Evaluation of the $Q$-square

Initially, introduced by Geisser (1974), the $Q^2$ serves as a widely utilized statistical metric to evaluate a model's predictive performance. Essentially, it gauges the model's efficacy in elucidating and forecasting observed outcomes within the dataset. As outlined by Fornell and Cha (1994), a positive $Q^2$ value signifies a superior predictive capability of the model, whereas a negative value implies a suboptimal alignment between the theoretical model and the empirical data. $Q^2$ values are derived through the "Blindfolding" technique implemented in the SmartPLS software, as illustrated in Table N7.

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The presence of positive $Q^2$ values in the results signifies that our model exhibits robust predictive quality.

4.2.3.5. Testing the research hypotheses

To assess the hypotheses, we will utilize the $P$ value test. Indeed, for a link between two variables to be significant, the $p$ value must be less than 0.05 (Hair et al., 2019). The results of the bootstrapping test related to the formulated hypotheses are presented in the following Table 8.

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>$O$</th>
<th>$M$</th>
<th>SD</th>
<th>T statistics</th>
<th>$P$ values</th>
<th>Validation</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: Customer Orientation → SME Performance</td>
<td>0.489</td>
<td>0.486</td>
<td>0.117</td>
<td>4.171</td>
<td>0.000</td>
<td>Confirmed</td>
</tr>
<tr>
<td>H2: Customer Orientation → Innovation Capability</td>
<td>0.522</td>
<td>0.528</td>
<td>0.128</td>
<td>4.075</td>
<td>0.000</td>
<td>Confirmed</td>
</tr>
<tr>
<td>H3: Innovation Capability → SME Performance</td>
<td>0.371</td>
<td>0.379</td>
<td>0.124</td>
<td>2.988</td>
<td>0.003</td>
<td>Confirmed</td>
</tr>
</tbody>
</table>


The test results reveal the presence of positive ($\beta$=0.489, $\beta$=0.522, and $\beta$=0.371) and significant direct effects ($p$ value < 0.05). Therefore, the first three hypotheses H1, H2, and H3 are supported.

To test hypothesis $H_4$, which states that the variable "Innovation Capability" mediates the relationship between customer orientation and performance, we analyzed the three effects in question (Table 9).

<table>
<thead>
<tr>
<th>Effect</th>
<th>Coefficient</th>
<th>SD</th>
<th>$T$-Val</th>
<th>$P$-Val</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct effect</td>
<td>Customer Orientation → SME Performance</td>
<td>0.489</td>
<td>0.117</td>
<td>4.171</td>
</tr>
<tr>
<td>Indirect effect</td>
<td>Customer Orientation → Innovation Capability → SME Performance</td>
<td>0.194</td>
<td>0.077</td>
<td>2.516</td>
</tr>
<tr>
<td>Total Effect</td>
<td>Customer Orientation → SME Performance</td>
<td>0.683</td>
<td>0.083</td>
<td>8.194</td>
</tr>
</tbody>
</table>

According to Table 9, the results confirmed that the total effect of the variable "Customer Orientation" on "SME Performance" is significant ($\beta = 0.683, t = 9.194, p = 0.000$). After integrating the mediating variable "Innovation Capability," the direct impact remains significant ($\beta = 0.489, t = 4.171, p = 0.000$). Furthermore, the indirect impact between customer orientation and performance through innovation capability was also found to be significant ($\beta = 0.194, t = 2.516, p = 0.000$). These results indicate that the relationship between customer orientation and SME performance is partially mediated by innovation capability. Therefore, we can conclude that $H_4$ is confirmed.

5. Discussions

5.1. Theoretical and managerial contributions

The results related to our first hypothesis ($H_1$) highlight a direct and significant impact of customer orientation on the performance of Moroccan SMEs. If the level of this orientation increases by one standard deviation of 0.117 (11.7%), SME performance also increases by one standard deviation of 0.489 (48.9%). Thus, based on the Moroccan context, we find that SMEs that adopt practices such as systematic measurement of customer satisfaction, understanding their needs, maintaining a lasting relationship, and integrating customer satisfaction into the core objectives of the company have better opportunities to enhance their overall performance. This result provides theoretical support for the conclusions drawn by researchers (Gallarza et al. (2023), Naver & Slater (1990), Gafa (2023), Haines (2022), Ismail (2023), Varadarajan (2020), Woehler & Ernst (2023), Aburayya et al. (2020), and Lee et Wei (2023)).

On the other hand, the conclusions resulting from the impact of customer orientation on the development of innovation capability in SMEs reinforce the validity of hypothesis H2. The results highlight that an increase of one standard deviation of 0.128 (12.8%) in customer orientation practices corresponds to an increase of one standard deviation of 52.2% in innovation capability. This correlation clearly emphasizes that, in the context of Moroccan SMEs, promoting innovation capability necessitates the adoption of an approach focused on the needs and preferences of customers. In summary, these results reinforce the idea that the success of innovation within these companies is intrinsically linked to their ability to meet the changing expectations of their customers. These conclusions align with the results of (Calantone et al. (2002), Keskin (2006), Pekovic et al. (2016), and Zehir, Köle, et al. (2015)).

Furthermore, our study also confirms hypothesis $H_3$, which states that innovation capability leads to superior performance. The results indicate that an increase in innovation capability of one standard deviation of 0.124 (12.4%) leads to
an increase in SME performance of one standard deviation of 0.371 (37.1%). This observation convincingly highlights that Moroccan SMEs with a strong innovation capability based on strategies such as research and development, technological leadership, innovation of new products and services, and changes in product characteristics are well positioned to significantly enhance their performance vis-à-vis their customers. Therefore, these results reinforce the conclusions put forward by (Larios-Francia & Ferasso (2023), Otache & Usang (2022), Rajapathirana & Hui (2018), Somwethee et al. (2023), Wijaya & Rahmayanti (2023), and Wilson et al. (2023)).

The 4th hypothesis $H_4$, which aims to test the mediating effect of integrating the variable "Innovation Capability" on the relationship between customer orientation and the performance of Moroccan SMEs, has been confirmed, and the results indicate a significant effect (Figure 3). This indicates that in the presence of strong innovation capability, the total effect of customer orientation on the performance of Moroccan SMEs increases.

$$\text{Impact total} = \text{Direct impact (0.489)} + \text{Indirect impact (0.522*0.371)} = 0.489 + 0.193 = 0.682$$

Figure 3 The mediating effect of innovation orientation.

The test results show that the adoption of a customer orientation leads to an improvement in the performance of Moroccan SMEs through two distinct paths:

The first path is direct and is reflected in hypothesis $H_1$, which states that a good customer orientation directly and positively impacts the performance of Moroccan SMEs.

The second path is indirect, in which this impact occurs through the intermediate and crucial role of the "innovation capability" variable in the link between customer orientation and the performance of Moroccan SMEs. In other words, this mediation reveals how innovation capability strengthens and amplifies the impact of customer orientation on customer performance.

Specifically, customer orientation encourages companies to better understand the needs and expectations of their customers, personalize their offerings, and maintain lasting relationships. However, customer orientation alone may not be sufficient to unlock the full potential for improving SME performance. This is where innovation capability plays an important role. Indeed, when SMEs adopt an innovative approach, they can develop new solutions, rethink their products and services, and propose relevant improvements that meet the evolving needs of customers.

Thus, the results of this study support and reinforce the conclusions put forward by other research, providing theoretical support for empirical studies conducted in various contexts. For example, the works of Ismail (2023), Lee and Wei (2023), Abdulrab et al (2022), and Aburayya et al (2020) have highlighted the positive and direct impact of customer orientation on SME performance. Furthermore, our research contributes to the literature by explaining the partial mediating effect of innovation capability on the relationship between customer orientation and SME performance. Thus, we complement other studies conducted in different contexts that have revealed a total mediating effect. For instance, D'souza et al (2022), Bamfo & Kraa (2019), Fidel et al (2018), and Zehir et al (2015).

5.2. Limitations and Research Perspectives

It is imperative to acknowledge several limitations and inherent perspectives within this study. First, although our sample size was carefully selected and analyzed, it remains relatively modest. Future research endeavors could enhance confidence in and generalize the findings by employing larger samples. Additionally, it is essential to recognize that while our chosen indicators for measuring certain variables were based on the literature, they may possess limitations in their comprehensiveness. Hence, there are opportunities for subsequent researchers to expand the scope by incorporating additional indicators. Moreover, while our study has highlighted the mediating role of innovation capability, other potential mechanisms warrant investigation. Therefore, exploring the impact of other contingent factors, such as industry nature, on the relationship between customer orientation, innovation capability, and SME performance would be beneficial.
6. Conclusion

In conclusion, this study underscores the critical role of customer orientation and innovation capability in driving the performance of Moroccan SMEs. By demonstrating the direct impact of customer orientation and the mediating role of innovation capability, the findings offer valuable insights for managers aiming to enhance their firms' performance. These results also contribute to the academic understanding of the interplay between these two factors, suggesting that a combined focus on customer needs and innovative practices is essential for sustainable growth and competitive advantage in the SME sector. Future research could further explore these dynamics in different contexts and industries to build a more comprehensive understanding of these relationships.

Ethical considerations

We confirm that we have obtained all consent required by the applicable law to publish any personal details of the research subjects. We agree to provide the Multidisciplinary Science Journal with copies of the consent or evidence that such consent has been obtained if requested.

Conflict of interest

The authors declare no conflicts of interest.

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