

# Factors influencing Customer–Focused Strategies on Boosting Innovation Performance in Enterprises

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## Abstract

Enterprise innovation is a critical factor determining the success of businesses. Customer focused strategies such as customer orientation are critical in driving innovation. This research investigates the intricate relationship between customer orientation and enterprise innovation performance, emphasizing the dynamic capabilities required for successful adaptation in the digital economy. Acknowledging the limited understanding of how external knowledge impacts innovation within enterprises, the study introduces a novel conceptual model incorporating dynamic capability theory and innovation theory. The research adopted quantitative design using primary data. Empirical data from a comprehensive survey of managers in 20 provinces and 3 municipalities in China substantiates the proposed model. A sample of 328 was used. The data was analysed using correlation analysis and SEM techniques.

Findings indicate that enterprises exhibiting strong customer orientation enhance both digital capability and organizational creativity, subsequently contributing to innovation output. Innovation performance was found to be influenced by digital capabilities, organizational creativity, and customer direct orientation. The study establishes a sequential mediation structure, with digital capability promoting organizational creativity, collectively mediating the positive relationship between customer orientation and innovation performance. Theoretical contributions are twofold: firstly, the study introduces a nuanced understanding of the mechanisms through which customer orientation influences innovation by incorporating orderly chain mediating variables. Secondly, the research enriches the understanding of how dynamic capabilities, specifically digital capability, and organizational creativity, mediate the transformation of customer orientation into innovation capability. Management practice implications

suggest that fostering a customer-oriented business philosophy is integral for enterprises seeking higher innovation performance. Additionally, embracing the digital economy entails improving digital capabilities, thereby facilitating digital transformation and innovation actions to enhance organizational creativity and overall innovation performance.

**Keywords:** Innovation Performance; Customer Focused-Strategies; Customer Direct Orientation; Digital Capability; Organizational Creativity; Innovation Performance

## Introduction

In the early 20<sup>th</sup> century, Joseph Schumpeter proposed the theory of innovation, asserting that profit-driven enterprises with market power consistently seek technological advancements, a viewpoint widely accepted in academic circles (Schumpeter, 20<sup>th</sup> Century). Building innovative capabilities necessitates organizational knowledge, capabilities, and motivation, aligning innovative activities with market needs and organizational goals. In this increasingly competitive business landscape, enterprises are compelled to adopt customer-focused strategies to sustain their innovation performance. Customer orientation, as a strategic approach, guides enterprises towards behaviours fostering superior customer value and cultivating a culture conducive to innovation (Day, 1994). It is actually recognized as a critical driver of innovation.

Customer orientation spans activities involved in gathering and disseminating customer information throughout the organization (Narver & Slater, 1990). Investments in customer orientation are deemed to offer the best value proposition in competitive environments (Lusch & Webster, 2010). In the evolving landscape, technologies such as mobile internet, cloud computing, big data, artificial intelligence, and blockchain interact to propel a new wave of business innovation. Recognizing the impact of these technologies, this study posits Digital ability as a potential mediator in the relationship between Customer orientation and innovation performance (Han et al., 1998). In the digital economy, Digital capability emerges as a key factor for sustained competitive advantage (Liu Yang et al., 2021).

In the current digital era, innovation performance is crucial for organizational success (Alegre & Chiva, 2008). The integration of electronic word-of-mouth, the Internet of Things, cloud computing, big data, artificial intelligence, and robotics opens avenues for effective shaping of innovation performance

(Mullangi et al., 2019). While previous studies explored factors influencing innovation performance beyond the digital economy, limited research has investigated the direct impact of customer-focused strategies on innovation performance. Existing literature predominantly emphasizes broad aspects of customer relationship management and market orientation. However, there is lack of a comprehensive exploration of how enterprises can leverage customer insights to drive innovation outcomes effectively. To bridge this gap, this paper focuses on the role of customer orientation in enterprise innovation performance. The proposed conceptual model links Customer orientation to Digital innovation capability, Organizational creativity, and Innovation performance, offering insights into the drivers of innovation performance (Alegre & Chiva, 2008).

This research addresses the fundamental question of how Customer orientation influences innovation performance. By constructing a theoretical model integrating Customer orientation, Digital capability, Organizational creativity, and Innovation performance, the study aims to reveal mechanisms and paths, offering theoretical reference and decision support for enterprises (Atuahene Gima, 1995).

The study will be guided by the following objectives:

Primary objective: To investigate factors influencing the relationship between Customer orientation, Digital capability, Organizational creativity, and enterprise Innovation performance.

Specific objective: To explore the direct effect of Customer Orientation, determining the mediating role of Digital capability and Organizational creativity, and assessing the chain mediating role in the relationship between Customer orientation and Innovation performance.

This study contributes practically by enhancing competitiveness in the digital economy, emphasizing customer needs, and guiding managers in cultivating digital capabilities. By exploring the impact of Customer orientation and Digital capability on Innovation performance, the study provides practical insights for formulating digital transformation strategies. Additionally, the study advances the understanding of customer-focused strategies as a key determinant of innovation performance. Which is critical for success of enterprises. It also provides a comprehensive framework for understanding how customer-centric approaches can foster innovation. The study also offer actionable insights for business leaders and policymakers seeking to enhance their firms' innovation capabilities.

This research paper comprises five sections. Section 1 introduces the main research question, emphasizing the impact of Customer orientation on business innovation performance. It outlines the study's importance, objectives, contributions, and limitations, providing definitions for key terms and

concepts. Section 2 reviews literature on Customer orientation, Innovation performance, Digital capability, and Organizational creativity, offering a theoretical foundation for the study. It proposes a conceptual framework diagram and highlights limitations in existing studies. Section 3 details the research methodology, including variable scale composition, measurement, hypotheses, data collection, analysis methods, and indicator significance. It also assesses scale reliability and validity. Section 4 discusses descriptive and inferential statistical analysis results, providing testing outcomes for research hypotheses. Section 5 concludes the findings, summarizing theoretical analyses and empirical tests, discussing contributions, limitations, and suggesting future research directions.

In conclusion, in today's competitive business environment, enterprises must adopt customer-focused strategies to drive innovation performance. While past research has explored the link between customer orientation and firm performance, limited studies have examined how customer-focused strategies influence innovation performance through key mediating factors like digital capability and organizational creativity. This research researches on factors influencing customer-focused strategies on boosting innovation performance in enterprises. The study is driven by the objective to investigate factors influencing the relationship between customer orientation, digital capability, organizational creativity, and enterprise innovation performance.

## **Literature Review**

### **Concept of Innovation Performance**

Scholars have continuously explored innovation from diverse perspectives, with theories evolving over time to encompass various dimensions, including technological, product, and market innovation (Schumpeter, 1912). The connotations of innovation have expanded to include product, service, and market renewal, as well as the development of new production methods and management systems. The European Innovation Survey (EIS) offers a comprehensive definition, framing innovation as the implementation of new or significantly improved products, processes, marketing methods, or organizational approaches. This definition encompasses diverse forms of innovation, highlighting its role as both a process and an output (Crossan, 2011). As innovation becomes paramount for maintaining competitive advantages, innovation performance emerges as a crucial area of study. The research in this paper focuses on Chinese enterprises, with innovation mainly referring to technological innovation.

Studies by He Yue and others (2010) offer a causality diagram illustrating the interplay of external and internal factors in influencing innovation performance. External influences encompass regional environment, network capability, government subsidies, and tax incentives. Internal factors involve technological learning, R&D investment, entrepreneurial performance, and digital transformation, each contributing to the complex landscape of innovation performance.

### **Concept of Customer Orientation**

Philip Kotler underscores the integral role of customer satisfaction in an enterprise's entire business activity. Theodore Levitt's introduction of customer orientation advocates a departure from traditional development concepts. Customer orientation extends beyond understanding target buyers to continually creating superior value. This involves grasping the buyer's complete value chain and understanding both present and evolving needs. Customer orientation entails understanding target buyers for the continual creation of superior value. It manifests through attitudes and behaviors, encompassing both business philosophy and enterprise values. Scholars like Gatignon & Xuereb (1997) stress that customer-oriented firms identify, analyze, understand, and respond to customer needs, fostering innovation. It extends from the market to individual levels, emphasizing a focus on customer demand and increasing customer value.

### **Concept of Digital Capability**

The transformative wave of the digital economy, characterized by openness, borderlessness, and heightened interactivity, compels enterprises to undergo digital transformation (Sun Xinbo et al., 2021). The global focus on business innovation, driven by digital technology, underscores the paramount importance of Digital capability. Integrating digital technology into production and operational activities is crucial for enterprises to overcome technological and resource bottlenecks (Sun Xinbo et al., 2021). The driver of this paradigm shift is the enterprise's digital capacity, encompassing digital manufacturing and digital service capabilities (Sun Xinbo et al., 2021).

considering the dimensions of digital capability, in the era of the digital economy, innovation is imperative for enterprises seeking sustainable development. As Gropponte notes in "Digital Survival," the prevalence of "the DNA of information" signifies a shift toward comprehensive digitalization in human life. Amid the digital survival environment, enterprises focus on digital capability as a source of sustainable competition. Digital capability is not a mere conceptual abstraction; its essence is grounded in studies of information capability and dynamic capability (Dong Zhao, 2021). In management and

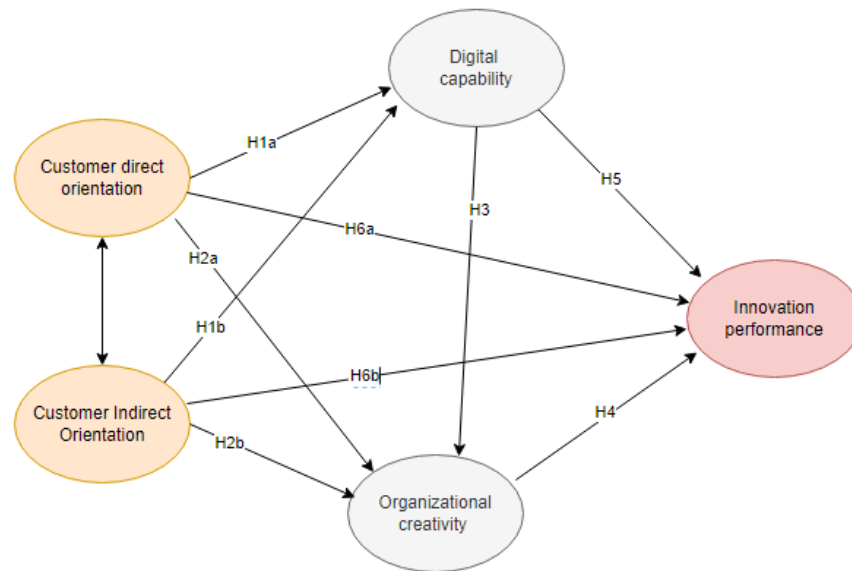
entrepreneurship research, digital capability emerges as a critical element for organizations to secure sustainable competitive advantages (Ross et al., 1996; Zhuang Caiyun et al., 2020).

### **Organizational Creativity**

Organizational creativity, rooted in a complex social system, encapsulates original, novel, and useful ideas or problem solutions related to products, services, procedures, or processes. This creativity is generated collectively by individuals, teams, and organizations (Amabile, 1988). Amabile (1983) defines creativity as the generation of novel and useful ideas, emphasizing outcome-oriented perspectives. The study evolved, incorporating diverse dimensions such as the creative process, creative products, creative people, and the creative environment (Harrington, 1990). Kirk and Spreckelmeyer (1998) argue that Organizational creativity involves individuals collaboratively generating, selecting, and optimizing novel problem-solving ideas. Harrington (1990) represents the outcome perspective, defining Organizational creativity as the interactive combination of creative processes, products, people, and environments. Woodman et al. (1993) extends this perspective to complex social systems, viewing Organizational creativity as the creation of valuable and useful innovations through collaborative processes. Alternatively, some scholars conceptualize Organizational creativity as a resource (Bharadwa and Menon, 2000). Lee and Choi (2003) view it as a process capability, emphasizing the organization's comprehensive ability to advance and refine novel ideas about products, services, and processes. Peng Chan et al. (2003) focus on problem-solving abilities across various organizational tasks, defining Organizational creativity as the synthesis of improvement and innovation at every level. Gu Qinxuan and Jiang Wan (2013) adopt a multilevel perspective, considering Organizational creativity as the organization's ability to generate novel ideas at individual, team, and organizational levels.

### **Conceptual Framework**

From the review of literature, the conceptual framework of the study was developed. The framework comprised of five variables, customer direct orientation, digital capability, customer indirect orientation, organization creativity, and innovation performance. Innovation performance is the dependent variable.



Based on the relationship of the conceptual framework, the following hypothesis were formulated.

H1: Customer orientation positively impacts Digital capability.

H2: Customer orientation positively impacts Organizational creativity.

H3: Digitalization ability positively impacts Organizational creativity.

H4: Organizational creativity positively affects Innovation performance.

H5: Digitalization capability positively influences Innovation performance.

H6: Customer orientation positively impacts Innovation performance.

H7: Digital capability acts as an intermediary between Customer orientation and Innovation performance.

H8: Organizational creativity acts as an intermediary between Customer orientation and Innovation performance.

H9: Organizational creativity acts as an intermediary between Digital ability and Innovation performance.

H10: Digital capability acts as an intermediary between Customer orientation and Organizational creativity.

H11: Digital capability and Organizational creativity act as a chain intermediary between Customer orientation and Innovation performance.

## Methodology

### Research Design and Scales

This study adopts a quantitative research methodology to examine the influence of customer-focused strategies on innovation performance. The research design is based on an extensive literature review, ensuring that measurement scales and analytical methods are derived from established studies. The literature review process involved searching scholarly databases such as **Google Scholar, Web of Science, and Scopus**, using keywords like *Customer Orientation, Innovation Performance, Digital Capability, and Organizational Creativity*. Each of the variables were measured using scales developed from literature. For customer orientation, scales were obtained from Xu Jianzhong (2018). It divides Customer orientation into Customer direct orientation and Customer indirect orientation. The measurement of organizational creativity (OC) is mainly referred to Lee & Choi's (2003) Organizational Creativity Scale. This scale evaluates the creative motivation, creative environment, creative process, and creative result of an organization, and can systematically reflect all aspects of organizational creativity process, is basically consistent with the connotation of organizational creativity in this study. For the organizational creativity, this study measures the use of organizational creativity with that designed by Geng Ziling, which includes a total of five items. For innovation performance, this study draws from the research of Chen, (2014), Guo Aifang, He Yubing, and Liang Liang to design questionnaires, measuring Innovation Performance (IP) in enterprises through five key indicators over the past five years. In this study, three control variables that are widely used in innovation research are selected, namely enterprise age, enterprise nature and enterprise scale. Enterprise age has a certain influence on the formation of enterprise Customer orientation and Digital capability.

### Population and Sample

This paper explores the relationship among Customer orientation, Digital capability, Organizational creativity, and Innovation performance in industrial enterprises. The study focuses on Shandong, Beijing, Jiangsu, Tianjin, Hebei, and other provinces and cities for convenience and feasibility. Shandong is the key area due to established relations and cost-saving benefits. Data collection employs convenient sampling. The study, involving Customer orientation, Digital capability, Organizational creativity, and Innovation performance, targets enterprise managers through a questionnaire. Convenient sampling is chosen based on accessibility and practicality, particularly suitable when more

stringent techniques are impractical. Structural equation model (AMOS) will be used for analysis. The recommended sample size is greater than 200, considering the number of parameters pre-estimated. A sample size below 100 may compromise correlation matrix stability. This study, with 35 questions, aims for a sample size exceeding 200.

### **Data Collection & Analysis**

Data collection involves eight stages, including literature review, pilot studies, and questionnaire distribution. The study collects 328 questionnaires through various channels, emphasizing the importance of demographic information and research variables. The questionnaire ensures authenticity and validity. SPSS and AMOS are used for analysis. Descriptive statistical analysis examines sample characteristics. Reliability and validity analysis assesses scale credibility. Structural equation modelling tests overall fit, while bootstrap method estimates intermediary effect and its confidence interval. Pre-investigation ensures questionnaire validity. Reliability analysis, using Cronbach's  $\alpha$ , checks consistency, with a threshold above 0.5. Validity analysis includes content validity, structural validity, convergent validity, and discriminant validity. Structural validity uses exploratory factor analysis with KMO and Bartlett's ball test criteria. The overall study followed the following steps. First was literature review and scale selection, then development of the research model and hypotheses, validation and refinement of the questionnaire. Then there was the full-scale data collection using online surveys and in-person distribution, then data cleaning and verification for authenticity, then statistical analysis using SPSS and AMOS, and lastly interpretation of results and hypothesis testing

## **Research Results**

### **Reliability Analysis**

The reliability test assesses the questionnaire's credibility, focusing on the consistency and stability of results. Internal reliability examines whether questions within a set measure the same concept and how well individual scale components exhibit internal consistency. Cronbach's Alpha measure's internal reliability, with a required threshold of 0.7. The Cronbach's Alpha coefficient of each dimension meets the basic standard of being greater than 0.7. Therefore, the questionnaire used in this study has good reliability.

**Table 1** Results of questionnaire reliability analysis

| Dimension                     | Number of terms | Cronbach Alpha |
|-------------------------------|-----------------|----------------|
| Digital capability            | 4               | 0.909          |
| Customer Direct Orientation   | 5               | 0.900          |
| Customer Indirect Orientation | 5               | 0.864          |
| Organizational creativity     | 5               | 0.889          |
| Innovation performance        | 5               | 0.892          |

### Validity Analysis

Confirmatory Factor Analysis (CFA) is employed to assess the formal survey scale's validity. AMOS24.0 software is used for this purpose, considering four aspects: absolute fitness index, value-added fitness index, simple fitness index, and internal fitness (CR and AVE). Criteria for evaluation include small  $\chi^2$ , RMSEA less than 0.08, GFI and AGFI above 0.8, NFI, RFI, IFI, TLI, and CFI greater than 0.9,  $\chi^2/df$  between 1–3, PGFI, PNFI, and PCFI above 0.5, and CR above 0.7 with AVE above 0.5. The model diagram is depicted in the figure, and the assessment results in the subsequent table indicate satisfactory fitting, affirming the model's validity.

**Table 2** Model Fitting Index

| Reference index | Evaluation criterion | Statistical values | Model adaptation judgment |
|-----------------|----------------------|--------------------|---------------------------|
| $\chi^2/df$     | between 1 and 3.     | 2.687              | Yes                       |
| AGFI            | > 0.8                | 0.819              | Yes                       |
| GFI             | > 0.8                | 0.854              | Yes                       |
| TLI             | > 0.9                | 0.911              | Yes                       |
| NFI             | >0.9                 | 0.882              | Almost                    |
| CFI             | > 0.9                | 0.922              | Yes                       |
| RMSEA           | Less than 0.08       | 0.072              | Yes                       |

The table above confirms that all model fitting indices from the confirmatory factor analysis meet the prescribed criteria. For discrimination validity, the study initially examines the correlation coefficient of each variable. The results reveal a positive correlation between variables, with a significant correlation coefficient at  $P < 0.001$ . Finally, the square root of the Average Variance Extracted (AVE) for each latent

variable is computed. If the square root value of AVE surpasses the correlation coefficient between a latent variable and others, it signifies robust discrimination validity for that variable.

### Demographic Overview

The respondents' personal characteristics, outlined in Table 4.6, provide a comprehensive snapshot of the survey sample. The gender distribution indicates a predominance of females, constituting 33.64%, while males make up 66.36%. Age-wise, the distribution is as follows: 30 and below (10.70%), 31–35 (14.37%), 36–40 (36.39%), 41–45 (20.18%), and 46 and above (18.35%).

**Table 3** Distribution of gender characteristics of samples

| Traits          | Variable category                                  | n   | (%)    |
|-----------------|----------------------------------------------------|-----|--------|
| Gender          | female                                             | 110 | 33.64% |
|                 | male                                               | 217 | 66.36% |
| Age             | 30 years old and under                             | 35  | 10.70% |
|                 | 31–35 years old                                    | 47  | 14.37% |
|                 | 36–40 years old                                    | 119 | 36.39% |
|                 | 41–45 years old                                    | 66  | 20.18% |
|                 | 46 years old and above                             | 60  | 18.35% |
| Academic degree | Master degree or above                             | 142 | 43.43% |
|                 | bachelor                                           | 109 | 33.33% |
|                 | College graduates                                  | 30  | 9.17%  |
|                 | Secondary vocational college/high school graduates | 30  | 9.17%  |
|                 | Junior high school graduates and below             | 16  | 4.89%  |

Regarding education, a higher educational attainment prevails, with 43.43% holding a master's degree or above, 33.33% with a bachelor's degree, and 9.17% each for junior college and technical secondary school or high school degrees. Respondents with a junior high school degree or below constitute 4.89%. Examining the characteristics of the enterprises under investigation, the analysis reveals a balanced distribution. In terms of enterprise age, 29.36% have been established for less than 5 years, 33.64% for 5–10 years, 26.91% for 11–20 years, 7.95% for 21–50 years, and 2.64% for 51 years or more. Considering enterprise scale, 37.92% of enterprises have fewer than 20 employees, 20.28% have 21–50 employees, 5.81% have 51–100 employees, 6.12% have 101–500 employees,

and 19.88% have more than 500 employees. This balanced distribution across enterprise age and scale contributes to the overall representativeness of the survey sample.

**Table 4** Sample distribution

| Basic feature     | Variable category                    | Frequency | Proportion (%) |
|-------------------|--------------------------------------|-----------|----------------|
| Enterprise age    | Less than 5 years                    | 96        | 29.36%         |
|                   | 5–10 years                           | 110       | 33.64%         |
|                   | 11–20 years                          | 88        | 26.91%         |
|                   | 21–50 years                          | 26        | 7.95%          |
|                   | 51 years and above                   | 7         | 2.64%          |
| Enterprise scale  | Less than 20 people                  | 124       | 37.92%         |
|                   | 21–50 people                         | 99        | 20.28%         |
|                   | 51–100 people                        | 19        | 5.81%          |
|                   | 101–500 people                       | 20        | 6.12%          |
|                   | 501 and above                        | 65        | 19.88%         |
| Enterprise nature | State-owned enterprise               | 84        | 25.69%         |
|                   | Private enterprise                   | 191       | 58.41%         |
|                   | Joint venture enterprise             | 9         | 2.75%          |
|                   | Exclusively foreign-owned enterprise | 2         | 0.61%          |
|                   | Others                               | 41        | 12.54%         |

#### Variable Correlation Analysis

To scrutinize the interdependence between variables, this study conducts correlation analysis, employing correlation coefficients and significance for preliminary model assessment. The standardized correlation coefficient, ranging from  $-1$  to  $1$ , indicates the strength of correlation. Closer to zero signifies weaker correlation, and vice versa. A coefficient surpassing  $0.7$  signals potential collinearity concerns in the model. Results in Table 4.9 reveal positive correlations between Customer orientation dimensions and Digital capability ( $0.372$  and  $0.466$ ), Customer orientation and Organizational creativity ( $0.372$  and  $0.419$ ), and Customer orientation and Innovation performance ( $0.430$  and  $0.483$ ). Digital capability also correlates positively with Organizational creativity ( $0.502$ ) and Innovation performance ( $0.525$ ), while Organizational creativity positively correlates with Innovation performance ( $0.516$ ). These findings align

with the study's theoretical expectations. With correlation coefficients predominantly below 0.7, a solid foundation is established for subsequent regression modeling and hypothesis validation.

**Table 5** Variable correlation analysis results

| Item                          | 1      | 2      | 3      | 4      | 5 |
|-------------------------------|--------|--------|--------|--------|---|
| Customer direct orientation   | 1      |        |        |        |   |
| Customer indirect orientation | .502** | 1      |        |        |   |
| Digital capability            | .372** | .466** | 1      |        |   |
| Organizational creativity     | .372** | .419** | .502** | 1      |   |
| Innovation performance        | .430** | .483** | .525** | .516** | 1 |

**Note:** \* \* At the level of 0.01 (double tail), the correlation is significant.

### Structural Equation Model (SEM)

The Structural Equation Model (SEM) was applied to evaluate the hypothesis of the study. This model accommodates multiple dependent variables simultaneously, addressing a limitation of conventional regression models that overlook interdependencies. The maximum likelihood method estimates model parameters. Evaluation criteria include NFI, RMSEA, CFI, and more. The obtained indicators meet established standards, validating the model's use for subsequent analyses.

**Table 6** Test results of structural equation model fitting degree

| Reference index      | $\chi^2/df$ | AGFI  | GFI   | TLI   | NFI   | CFI    | RMSEA  |
|----------------------|-------------|-------|-------|-------|-------|--------|--------|
| Evaluation criterion | 1–3         | > 0.8 | > 0.8 | > 0.9 | > 0.9 | > 0.9  | < 0.08 |
| Statistical values   | 2.687       | 0.819 | 0.854 | 0.911 | 0.882 | 0.922  | 0.072  |
| Model adaptation     | Yes         | Yes   | Yes   | Yes   | Yes   | Almost | Yes    |

### Empirical Analysis of Objectives

The empirical analysis was conducted to evaluate the objectives of the study, To determine the factors influencing customer-focused strategies on boosting innovation performance in enterprises. SEM was used to conduct this relationship analysis. It incorporates independent variables (Customer direct orientation, Customer indirect orientation), intermediary variables (Digital capability, Organizational creativity), and the dependent variable (Innovation performance). A fitness test confirms model alignment

with formal survey data. Path analysis involves estimating regression coefficients, with results meeting significance criteria. The results are summarized in table below.

**Table 7** Path relationship of the study variables

|     | Variable relationship paths                               | Beta  | p-value | Hypothesis supported? |
|-----|-----------------------------------------------------------|-------|---------|-----------------------|
| H1a | Customer direct orientation → Digital capability          | 0.164 | P<0.05  | Yes                   |
| H1b | Customer indirect orientation → Digital capability        | 0.437 | P<0.05  | Yes                   |
| H2a | Customer direct orientation → Organizational creativity   | 0.152 | P<0.05  | Yes                   |
| H2b | Customer indirect orientation → Organizational creativity | 0.159 | P<0.05  | Yes                   |
| H3  | Digital capability → Organizational creativity            | 0.424 | P<0.05  | Yes                   |
| H4  | Organizational creativity → Innovation performance        | 0.241 | P<0.05  | Yes                   |
| H5  | Digital capability → Innovation performance               | 0.292 | P<0.05  | Yes                   |
| H6a | Customer direct orientation → Innovation performance      | 0.150 | P<0.05  | Yes                   |
| H6b | Customer indirect orientation → Innovation performance    | 0.202 | P<0.05  | Yes                   |

As presented in Table above, the relationship between the variables according to the objectives are presented. The results indicated that customer direct orientation has positive and significant effect on digital capability (0.164,  $p<0.05$ ), and customer indirect orientation has positive and significant effect on digital capability (0.437,  $p<0.05$ ), which confirmed hypothesis 1a and 1b. The results also indicated that customer direct orientation has positive and significant effect on organizational creativity (0.152,  $p<0.05$ ), and customer indirect orientation has positive and significant effect on Organizational creativity (0.159,  $p<0.05$ ), confirming H2a and H2b.

Digital capability was found to have a positive and significant effect on Organizational creativity (0.424,  $p<0.05$ ) supporting H3. Organizational creativity has positive and significant effect on Innovation performance (0.241,  $p<0.05$ ) supporting H4. Digital capability has positive and significant effect on

Innovation performance (0.292,  $p < 0.05$ ) supporting H5. Additionally, customer direct orientation has positive and significant effect on Innovation performance (0.150,  $p < 0.05$ ), while customer indirect orientation has positive and significant effect on Innovation performance (0.202,  $p < 0.05$ ), supporting H6a and H6b.

## Discussion

There are four key aspects of the research. Firstly, it emphasizes the significant impact of Customer Orientation on Innovation Performance, contributing insights to existing literature. Secondly, the introduction of Digital Capability enriches understanding, revealing its mediating role between Customer Orientation and Innovation Performance. Thirdly, the study explores the mediating function of Organizational Creativity, shedding light on its influence on enterprise performance. Finally, the continuous mediation of Digital Capability and Organizational Creativity underscores the intricate relationship between Customer Orientation and Innovation Performance, offering a comprehensive perspective for future research.

The general results of this study indicates that that customer orientation enhances organizational creativity and innovation capabilities, which in turn improve firm performance, particularly in varying market contexts (Racela & Thoumrungroje, 2019).

First recommendation is to prioritize customer orientation. Enterprises should recognize the pivotal role of Customer Orientation in achieving higher Innovation Performance. Strengthening customer engagement, involving customers in product innovation, and aligning product development with customer needs are crucial strategies. These findings echo Vasconcellos et al. (2021), who indicate that fostering creativity within organizations, supported by digital capabilities, leads to superior performance outcomes, especially during digital transformation efforts. Cultivating a customer-oriented business philosophy, formulating strategic plans, and fostering communication with customers are essential steps. Simultaneously, enhancing Digital Capability is crucial to leverage the benefits of Customer Orientation and expedite technological innovation. Secondly, consider the path mechanism. While a negative relationship between Customer Orientation and Innovation Performance is not found, enterprises should carefully balance the intensity of Customer Orientation.

The study underscores the mediating roles of Digital Capability and Organizational Creativity after Customer Orientation. These findings are in line with Yu-ping (2024), that digital capabilities positively correlate with enterprise performance, enhancing customer satisfaction and sales growth. This implies that they also improve innovation performance by fostering a strong digital orientation, which is vital in competitive environments. As such, enterprises need to evaluate their innovation output, align the implementation of Customer Orientation with actual capabilities, and adjust strategies based on environmental factors and organizational creativity. Thirdly, emphasize digital capability. In the digital economy landscape, improving Digital Capability becomes imperative for enhancing Innovation Performance. Enterprises should focus on digital capacity building, utilizing digital resources and technology to transform various aspects of their operations. This includes changing perception, decision-making, organization, marketing, and business models. It is therefore arguable that Creativity is a key resource that, when supported by digital capabilities, leads to better organizational performance. Firms that prioritize creativity can adapt more effectively to changes, thus enhancing their innovation outcomes (Vasconcellos et al., 2021).

Attention should not only be on information technology investment but also on building and utilizing IT capabilities to empower practical activities, such as product innovation and understanding customer needs.

This study contributes a significant contribution of new knowledge. The study reveals that customer orientation enhances digital capability and organizational creativity, with indirect orientation having a stronger impact on digital capability. Digital capability boosts organizational creativity, and both drive innovation performance. Customer orientation influences innovation both directly and through these mediating factors, highlighting the critical role of technology and creativity in fostering innovation. The summary of the findings are also summarized in Figure 4.1

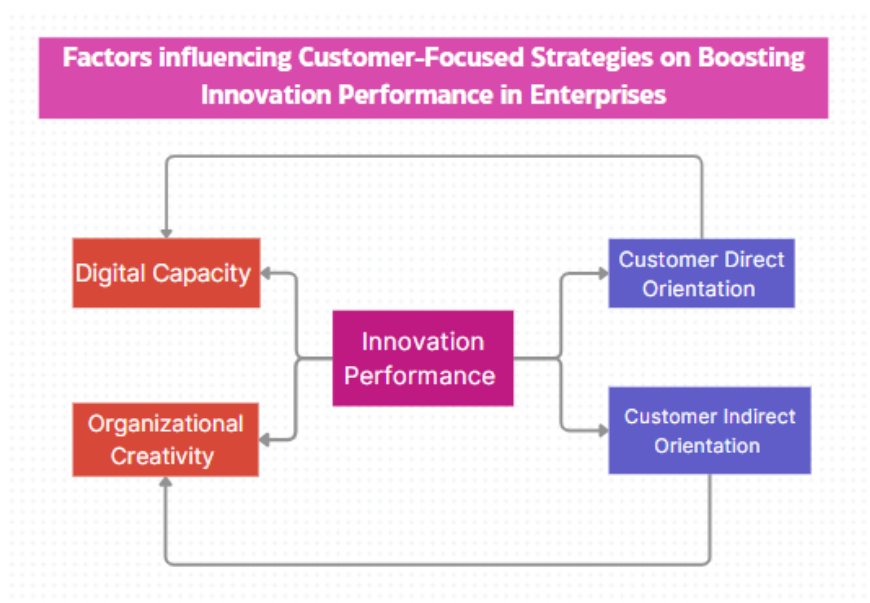


**Figure 1** 4Summary of the findings of the study

## Conclusion

Considering the effect of customer orientation on innovation performance, this study validates the positive impact of direct and indirect customer orientation, on Innovation Performance. The research introduces a nuanced perspective, distinguishing between dimensions of Customer Orientation. Findings affirm that customer-centric strategies enhance an enterprise's understanding of market dynamics, fostering innovation. Customer feedback stimulates problem-solving and product development, positioning customer-oriented enterprises for sustained growth. Digital Capability emerges as a crucial mediator, connecting Customer Orientation with Innovation Performance. Customer Direct and Indirect Orientation contribute to Digital Capability, aligning organizations with the evolving digital landscape. Organizational Creativity acts as a vital bridge between Customer Orientation and Innovation Performance. The study confirms that both Customer Direct and Indirect Orientation positively influence Organizational Creativity. Digital Capability and Organizational Creativity jointly mediate the positive relationship between Customer Orientation and Innovation Performance.

## Further Study

Future researchers are encouraged to enhance theoretical depth by exploring the application of integrated market orientation across different enterprise periods. Introducing more variables and control factors would enrich the understanding of the relationship between market orientation and enterprise

performance. Secondly, extend the research scope to specific industries, small and medium-sized enterprises, and non-profit units. Comparative analysis of basic enterprise information across industries or regions can provide valuable insights. Exploring diverse research objects will contribute to a comprehensive understanding. Thirdly, consider developing or refining measurement scales tailored to different industries. This would ensure more accurate assessments in diverse contexts. Incorporating industry-specific characteristics into measuring tools will enhance the reliability and validity of future empirical research.

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