



The mediating role of employee performance on organizational culture, Human Capital and product Innovation in e-commerce in Shanghai.

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Abstract

The study investigates the impact of human capital, organizational culture, and product innovation on entrepreneurial performance in e-commerce small and medium enterprises in Shanghai. It aims to provide management suggestions for creating an effective innovation atmosphere and improving performance. The study employs both quantitative and qualitative methodologies, including various case analyses and interviews with entrepreneurs, managers, and specialists. The sample size consists of approximately 375 entrepreneurs and staff for quantitative research, as well as an additional 20 key informants for qualitative research. The method of this research used SEM-PLS analysis. The results indicate that human capital, organisational culture, product innovation, and employee performance have strong content validity and can effectively enhance organisations' competitiveness. We can use the results to formulate tactics for fostering creativity in small and medium-sized enterprises (SMEs), emphasizing proficient leadership and a conducive work atmosphere. The study examines the model's alignment with official survey data and test results, revealing a high correlation between hair assessment standards and the model. The results support the need for further research, highlighting the importance of employee performance in the relationship between human capital, product innovation, and entrepreneurial performance in e-commerce small-medium enterprises. The study found a significant relationship between employee performance (EP), human capital (HC), and entrepreneurial performance (EP), with HC having the most impact. Product innovation (PI) also significantly influences EP. The study emphasises the need for strategic management of human capital and employee performance in SMEs to optimise performance outcomes and achieve success in the competitive e-commerce market. It also suggests a relationship between organisational culture and employee performance, emphasising the need for a comprehensive understanding of EP determinants.

Key words: Human capital, Organizational culture, Product innovation, Entrepreneurial Performance, e-commerce small and medium enterprises

Introductions

The COVID-19 pandemic has significantly impacted the development and lifespan of Chinese SMEs, which are the driving force behind China's economic growth. To achieve



sustainable development, researchers are studying causal factors such as institutions, technology, intellectual capital, human resource management, knowledge sharing, lean processes, and corporate culture. Implementing effective strategies in these areas can help SMEs adapt and thrive even in challenging times (Dai, H. Feng, J. Hu, Q. Jin, H. Li, R. Wang, R. Wang, 2021). SMEs are often dismissed as low-tech, hyper-local, and often employ just the founder and their immediate family. The Chinese government has implemented policies and initiatives to support SMEs, such as financial assistance, tax incentives, and simplifying administrative procedures. The growth of e-commerce in China can be broken down into three primary stages: acceleration, standardisation, and globalisation. The Mass Entrepreneurship and Innovation (MEI) policy initiative, which emphasizes strengthening support for fiscal and taxation policies, has been questioned due to issues such as increased subsidies, losses, concessions, and backwardness. The optimal implementation strategy for MEI policy is the combination of R&D subsidies and tax incentives (Bukowski & Rudnicki, 2019; López-Cabarcos, Pieiro-Chousa, & Quioá-Pieiro, 2021; Granovetter, 2005; Rodriguez-Pose et al., 2021). Organisational culture is a crucial set of values, beliefs, and symbols that influence a company's operations and learning. It can be divided into four types: adaptive, message, bureaucratic, and group (López-Cabarcos, Pieiro-Chousa, Quioá-Pieiro, & Santos-Rodrigues, 2021). It influences attitudes, behaviors, and expectations, and can positively impact social responsibility and creativity. The relationship between corporate culture and sustainable performance is inconsistent, with some arguing it hinders company reform and others promoting sustainable development. Strong corporate cultures boost business performance by promoting employee engagement, loyalty, and productivity. Human capital is a crucial aspect of an organisation's competitive advantage, enhancing performance, increasing productivity, and reducing costs (Kai Zhao & Jun-mei Ye, 2023).

Research on how SMEs can improve their sustainable performance through their corporate culture is limited, despite sustainability being a top priority. SMEs often lack resources, technology, and human resources, which hinder their ability to achieve sustainable development (Beljazia, 2021; Zapata & Gomez, 2021; Chen, 2022). Understanding how a company's culture influences sustainable practices can provide valuable insights for SMEs looking to improve their long-term sustainability (Dai, H. Feng, J. Hu, Q. Jin, H. Li, R. Wang, R. Wang, 2021). SMEs can reduce waste, lower energy consumption, and minimize their carbon footprint, attracting environmentally conscious customers and enhancing their reputation (Gallardo et al., 2019; Lari et al., 2020; Alkhateeb et al., 2016; (Rizalnur and Rizka, 2019). Embracing organizational culture and human capital can foster an environment that encourages employee innovation and collaboration, leading to increased productivity and competitiveness in the global market (Das, M.; Rangarajan, K.; Dutta, G., 2020; Jilani, M.M.A.K.; Fan, L.; Islam, M.T.; Uddin, M., 2020). Investing in intellectual resources is crucial for long-term competitive advantage and emphasising innovation, creativity, and knowledge management (Abdelmotaleb & Saha, 2020; Riyadh et al., 2021).

This research aims to understand the contribution of SMEs in China to the implementation of human capital, organizational culture, and employee contributions to long-term performance sustainability. It focuses on the mediating role of organizational culture in



the relationship between internal social responsibility and intellectual capital in industry. The study aims to clarify the concepts of employees, human capital, and organizational culture, and investigate the effects of organizational culture on human or intellectual capital. The findings suggest that a strong organizational culture positively impacts the development and utilization of human capital and employees within SMEs. The study recommends SMEs invest in training and development programs to improve their human capital skills and knowledge.

Sustainable development is crucial for SMEs' performance, promoting economic growth, job creation, and innovation. The COVID-19 pandemic has shortened the lifespan of SMEs, and researchers are studying factors contributing to long-term performance, such as institutions, technology, intellectual capital, human resource management, knowledge sharing, lean processes, and corporate culture. The competing-values framework (CVF) divides organisational culture into flexibility and control cultures. Government policy tools, such as R&D subsidies and tax incentives, can help resolve market failures and encourage innovation. Human capital, which accumulates workers' knowledge and skills, is a valuable asset for organisations, enabling them to stay competitive and adapt to changing market conditions. Investing in training and development programmes, fostering a supportive work environment, and addressing various factors can create a foundation for long-term success and innovation. By continuously investing in human capital, organisations can cultivate a culture that values learning and growth, ultimately leading to a more innovative and competitive workforce. This proactive approach to talent development can also help organisations navigate the complexities of a rapidly changing business landscape.

Research Objectives

- 1) To identify the component the impact of human capital, organizational culture, and product innovation on entrepreneurial performance in e-commerce small-medium enterprises.
- 2) To examine the relationship between human capital organizational culture, and product innovation on entrepreneurial performance in e-commerce small-medium enterprises.
- 3) To analyze the mediation of the role of employee performance in the relationship between human capital, product innovation and entrepreneurial performance in e-commerce small-medium enterprises.
- 4) To analyze the mediation role of employee performance in relation to organizational culture, product innovation on entrepreneurial performance in e-commerce small-medium enterprises.

Research Hypothesis

These are five hypotheses.

H 1: Human capital has a positive effect positively the entrepreneurial performance in e-commerce small-medium enterprises.



H 2: Organizational culture has a positive effect the entrepreneurial performance in e-commerce small-medium enterprises.

H3: Product innovation positively the entrepreneurial performance in e-commerce small-medium enterprises.

H 4: Employee performance has a positive effect the entrepreneurial performance in e-commerce small-medium enterprises.

H 5: Employee performance plays a mediating role in the influence of human capital, organizational culture, product innovation and the entrepreneurial performance in e-commerce small-medium enterprises.

The study explores entrepreneurial performance in Shanghai's e-commerce small-medium enterprises, focusing on low-tech, labour-intensive sectors. It aims to improve innovation, organisational culture, and employee performance, leading to increased profitability and competitive advantage.

Review of Literature and Concepts

This literature review explores theories, ideas, and studies related to organizational culture, human capital, employee performance, product innovation, management innovation for SMEs in China, and the research conceptual framework.

Relationship between organizational culture, human capital, employee performance, product innovation, management innovation for SMEs in China

Corporate culture is the set of values, attitudes, norms, and beliefs that define an organization and its members. An organization's aims, strategy, structure, and relationships with employees, customers, investors, and the community shape its culture. It's vital to a company's success. Organisational culture, a complex combination of habits, abilities, customs, and morality, is a unique set of beliefs and practices influencing knowledge sharing and knowledge transmission. Cultural integration in multinational enterprises requires long-term planning, leveraging cultural resources, fostering harmonious environments, and prioritising cultural sensitivity and open communication (Zhao & Li, 2021). However, there has been no agreement on how to define corporate culture. Based on their own studies, scholars both at home and abroad have examined organizational culture from many angles. Cultural integration in multinational enterprises requires long-term planning, analysis of local and foreign cultures, and a company culture integration team. It involves deepening channels, improving communication, and fostering inclusivity. Corporate governance, strong corporate cultures, and regular monitoring of internal control measures are crucial for enhancing performance and mitigating risks in small enterprises (Abdullah, Ramayah, and Mutahar, 2017). Businesses should prioritise employee satisfaction, management standards, and training in order to improve productivity and engagement.

High-performance organisations are characterised by strong management, knowledge management, interpersonal relationships, innovation, and creativity (Li Yaling, Li Yuting & Liu Rui. (2020). Employee resilience is crucial for organisational resilience, and organisations that have demonstrated resilience during the COVID-19 pandemic have established resilience frameworks. Product innovation, which involves creating new products



or improving existing ones, can lead to growth, expansion, and a competitive advantage. It can be divided into radical and incremental innovation. The Oslo Manual recommends measuring innovation through qualitative and quantitative data, allowing companies to make informed decisions and allocate resources effectively. (Brown et al., 2021; Bartuseviiien et al., 2021; Chen et al., 2021; Diedrich et al., 2021; Prayag et al., 2018; Bartuseviiien et al., 2021; Deloitte, 2021).

Innovation can be categorised into product, technology, and business model innovation. Product innovation has lower strategic importance, risk, and complexity, while technology innovation requires collaboration and a broader range of skills. (Gao & Gao, 2021). Organisational innovation involves generating, implementing, and commercialising new knowledge. There are five types of innovation activities: technological, organisational, and explorative. Environmental environments, such as dynamism, complexity, and munificence, significantly impact firms' strategies and performance. Small and medium-sized enterprises (SMEs) face constraints in implementing innovation projects, but they must access external resources to improve performance. (Chao Li, 2017). An innovative organisational culture is a cultural form conducive to innovation, integrating innovation-led practices into strategic activities. (Gao & Gao, 2021). The importance of innovation in businesses has led to an increased focus on creative organisational culture. An innovative organisational culture is a pattern of conduct that enhances a company's capacity for creative problem-solving. It can inspire a variety of values and attitudes within an organisation, changing employees' perspectives and promoting corporate performance (Wuttipong K., et.al.,(2021). Innovation systems, such as national and regional systems, are crucial for firms' competitiveness and national economies. (Chen, 2021). Technological innovation involves utilising new knowledge and technology to enhance product quality, market share, and competitiveness. Continuous research, collaboration, and staying updated with industry trends are crucial.

This section discusses the concept of management innovation in SMEs in China, focusing on the resource-based view and its mechanisms for driving firm growth. SMEs can benefit from characteristics such as creativity, agility, adaptability, and adaptability. They are better prepared for incremental innovation and renewing business models (W.,B., Wuttipong K., et.al. (2020). The Agile Innovation Model includes nine key elements, including product strategy, competitive strategies, technology management, and intelligence. Government policies and innovation networks are crucial for collaboration and economic growth. Management innovation is a crucial source of competitive advantage and a pre-requisite for effective technological innovation. However, most literature on management innovations has focused on their antecedents and outcomes, with limited research on the process by which management innovations unfold. (Rohlfer, Hassi, and Jebsen, 2022; Yu et al., 2022).

The study by Juris, Adamko, and Savov (2020) examines the support for innovative activities by small and medium-sized enterprises in the Slovak Republic. The authors argue that SMEs can respond quickly and effectively to customer requirements and market changes. They propose a streamlining support scheme for SMEs, focusing on their readiness to invest in research and development. The paper highlights the challenges SMEs face due to limited resources, capacity constraints, disruptive technologies, and the concept of exponential



organisations (ExO). It also discusses the role of government policies and support programmes in facilitating digitalization and innovation for SMEs. The study also examines successful case studies of SMEs that have effectively embraced digitalization and innovation, highlighting the benefits they have gained in terms of increased productivity, market reach, and competitiveness. Small and medium-sized enterprises (SMEs) are driving technological growth in high-tech industries due to their lean organisational structure and quick response to technological opportunities. (Rammer, C., M. Berger, T. Doherr, M. Hud, P. Hünermund, Y. Iferd, B. Peters, and T. Schubert, 2017). Corporate culture is crucial for an organisation's performance, requiring long-term planning, human capital investment, and continuous performance measurement. Shanghai, Shenzhen, Nanjing, Beijing, Wuhan, and Dalian are ranked as the top 10 Chinese cities for SMEs, with e-commerce markets expected to grow.

Teng Haili and Li Yuanyuan (2021) explored the impact of corporate culture on brand value and its course, as well as the regulatory function of entrepreneurship and corporate social responsibility. They found that excellent company culture significantly impacts an enterprise's gene, and entrepreneurship modifies the positive relationship between corporate culture and brand value. John R. Graham, Campbell R. Harvey, Jillian Popadak, and Shivaram Rajgopal (2017) found that corporate culture is a top-three driver of firm value, and 92% think changing it will boost value. Utin Nina Hermina and Sri Yanthy Yosepha (2019) studied employee performance at PT. Trakindo Utama Pontianak, focusing on leadership, motivation, and work discipline approaches. Results showed that workplace discipline, leadership style, and motivation were important factors affecting employee performance. Ching, Shian, Nien, and Huen (2016) explored the relationship between job autonomy, job communication, intrinsic motivation, skill flexibility, and job satisfaction.

Rabia Imran, Tahir Saeed, M. Anis-ul-Haq, and Afsheen Fatima (2019) studied organisational climate as a predictor of innovative work behaviour, finding that both the open system model and the rational goal model have a significant positive impact on innovative work behaviour. This study explores the relationship between firm, environment, job, and employee factors, focusing on intrinsic motivation, skill flexibility, and job satisfaction. It also investigates factors affecting industrial employee productivity in Jordan, Chinese institutions, and MEI policy implementation in China. The research also highlights the importance of institutional characteristics in emerging economies. It also highlights the impact of innovation on firm performance, with exploration and exploitation orientations having different effects. The study also examines entrepreneurial e-commerce performance in China, focusing on low-tech, labour-intensive sectors. The study explores the influence of human capital, organisational culture, product innovation, and employee performance on Chinese SMEs' innovation, highlighting the importance of adopting technological innovations and integrating technology into operations for competitiveness in China's rapidly evolving economy. (Figure 1)

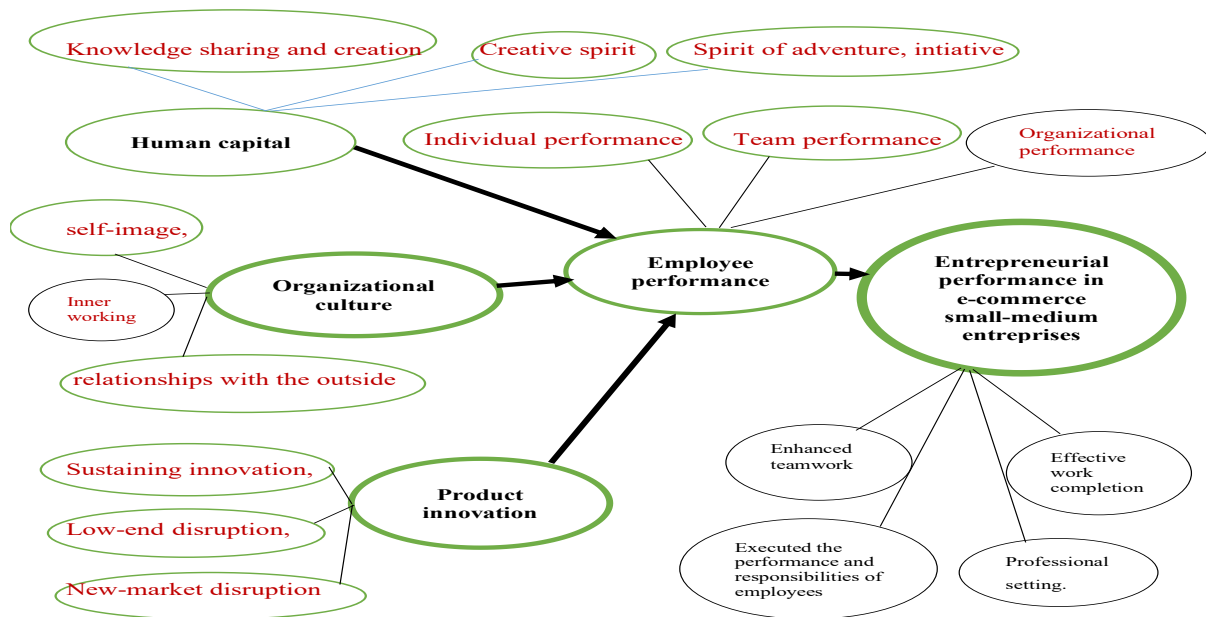


Figure 1 The relationship between human capital, organisational culture, product innovation, and employee performance all positively impact entrepreneurial performance in small and medium-sized e-commerce, with employee performance playing a mediating role.

Research Methodology

The study investigates the influence of human capital, organisational culture, and product innovation on entrepreneurial performance in e-commerce SMEs, finding that employee performance mediates these influences.

Population and Sample

This study examines SMEs innovation in China, focusing on high-tech, labour-intensive sectors and their impact on export growth. The top three emerging first-tier cities in China are Chengdu, Chongqing, and Hangzhou, followed by Xi'an, Wuhan, Suzhou, Zhengzhou, Nanjing, and Tianjin. The study employs quantitative and qualitative methods, multiple case analyses, and interviews with entrepreneurs, managers, and experts. The sample size is approximately 375 entrepreneurs and staff of SMEs in Shanghai. The qualitative study interviewed 20 entrepreneurs to understand SMEs' innovation and culture, while the quantitative study collected empirical data on employee performance, human capital, and organisational culture in Chinese SMEs, impacting innovation strategies. The study aims to provide insights into the impact of SMEs on export growth and innovation strategies in China.

Research Tools

The study explores the relationship between human capital, organizational culture, product innovation, employee performance, and entrepreneurial performance in e-commerce small-medium enterprises in China. It uses a 5-point Likert scale and validated questionnaires.



The findings suggest that human capital, organizational culture, product innovation, and employee performance have good content validity, and can help businesses improve their competitiveness. The findings can be used to develop strategies for promoting innovation in SMEs, emphasizing effective leadership and a positive work environment.

Data Collection and Data Analysis

The study aimed to explore the relationship between human capital and organizational culture in small and medium-sized enterprises (SMEs) in Shanghai using a questionnaire. Data was collected using SPSS and analyzed using descriptive statistics, independent sample t-test, and ANOVA. The reliability and validity of the questionnaire were assessed using Cronbach's alpha value, confirmatory factor analysis (CFA), Pearson's correlation coefficient, exploratory factor analysis (EFA), and structural equation modeling (SEM). The mixed-methods research (MMR) method was used for practical purposes in nursing and healthcare. The study employed various strategies, including sequential, concurrent, and transformative procedures, to address the problem effectively. The study emphasizes the importance of clarity in research questions and proposals, as it effectively addresses the problem (Creswell, J., 2008).

Research Results

Objective 1) To identify the component the impact of hum capital, organizational culture, and product innovation on entrepreneurial performance in e-commerce small-medium enterprises.

The human capital scale rewards adventure, initiative, dedication, self-confidence, and confidence in one's ability to push boundaries. Knowledge sharing boosts creativity and invention, with ratings of 4.06 and 3.96. A distraction-free setting is crucial for creative thinking, according to the creative spirit part. The scale shows that information sharing improves innovation performance in organisations. The creative spirit highlights the necessity of a distraction-free atmosphere to produce new ideas. The human capital scale emphasises the relevance of creativity in businesses for innovation and growth.

Further investigation revealed that the mean of the self-image dimensions in the statement "A strong corporate culture can enhance employee morale and productivity" was 4.86. (4.86), "We have ethical values that help us to differentiate right from wrong and guide our behaviour." (4.14). "It also influences the inner workings of the organisation, shaping how employees interact and make decisions" (4.09), in the section "Every individual looks for opportunities to improve the organisation" (4.37). For external partnerships, "it is essential for companies to actively manage and nurture their organisational culture to drive innovation." (3.92).

Each measuring element on the product innovation scale has a high average value. Product disruption opens new markets, driving demand and growth. To sustain innovation, improve existing products to meet client needs and maintain market share. Product innovation requires creativity, market research, customer insights, technology, and project management (3.97). Meeting evolving customer needs, beating competitors, and growing sustainably requires collaboration (3.94). Businesses must update their services to stay competitive. Innovation and teamwork can boost long-term growth. New-market disruption alters product



production, distribution, marketing, and sales in order to compete and create new markets.

Organisational success depends on employee performance. It includes employee recognition and development (4.62), diligence (4.53), and collaboration (4.44). Individual performance measurements identify top performers and areas for growth. Successful outcomes depend on team performance (4.06), which encourages cooperation and alignment with organisational goals (4.01). ROI, return on assets, and profit margins measure an organization's performance (3.92). Further research revealed that "Improved teamwork, collaboration, and communication can boost productivity, innovation, job satisfaction, and retention rates within an organisation" (4.66) and "A positive work environment promotes teamwork, collaboration, and communication, leading to increased productivity, innovation, job satisfaction, and retention rates, ultimately enhancing efficiency and organisational success" (4.47). (4.47).

"Effective communication strategies aligned team members with project goals, fostered a collaborative environment, and improved productivity." (4.24). "Organisations can foster a culture of respect, trust, and support, fostering a positive environment where employees feel valued, motivated, and engaged." (4.09). According to Executed, "By fostering a positive work environment and promoting a culture of continuous improvement, the individual was able to motivate employees to consistently meet and exceed expectations" (4.07). A respectful and supportive workplace can boost employee performance and productivity. Fostering collaboration, trust, and motivation can boost project success and team satisfaction.

Objective 2) To examine the relationship between hum capital organizational culture, and product innovation on entrepreneurial performance in e-commerce small-medium enterprises.

The study used KMO and Bartlett tests to assess human capital markers like knowledge sharing, creativity, adventure, and initiative. These indicators were suitable for factor analysis, with a KMO score of 0.847, a Bartlett test chi-square distribution value of 1346.441, and a spherical test significance of less than 0.001. The study found three factors that explained 75.084% of the scale's variation, influencing its validity. The rotating factor matrix separates 10 question options into three factors with item loadings greater than 0.5 to help researchers analyse data and identify patterns for informed decision-making. Principal factor analysis (PFA) revealed four similar components that explained 76.036% of the variation and had excellent validity. Researchers can use scales to gather reliable data for building analysis and decision-making. The study examines e-commerce SME employees and entrepreneurial performance. The research data has 10 components and 3 dimensions, including factorable employee performance indicators. Extracting and loading squares from the dataset using a rotational factor matrix reveals variance and eigenvalues and helps find patterns and relationships. A KMO score of 0.910 indicates appropriateness, while Bartlett test results show a chi-square distribution of 2170.34 and spherical test significance of less than 0.001. We also examine content and construct validity, which refers to the content of the test or scale and the representativeness of the items.

Confirmatory factor analysis checks the discriminant and convergence validity of each latent variable to make sure that the researcher's hypothesis about the relationship between the



observed variable and a factor is correct. The study also tests human capital validity using average variance extraction to reduce measurement error. The findings indicate that component analysis is possible for future investigations and can help researchers comprehend dimension-item relationships. This study shows great flexibility and convergent validity in measuring organisational culture. The modified GFI and goodness of fit index (GFI) exhibit a close relationship with a threshold of 0.8. The study's GFI is 0.942, indicating adaptation. The model's fit index benchmark is NFI, 1 minus the preset model difference. The Tucker-Lewis index (TLI) is 0.928 (0–1). CFI is 0.948, far above average. The MSE and RMSEA are below 0.08. The study's confirmatory factor analysis demonstrates excellent model fit for all indicators, indicating accurate and strong measurement. We use a structural equation model to assess entrepreneurial performance in small and medium-sized e-commerce, which encompasses human capital, organisational culture, product innovation, employee performance, and operational results (standardisation). We study information sharing, creativity, innovation, low-end disruption, individual and team performance, successful work, and professional employee accountability.

We examine the model's overall adaptation degree of inspection to verify a match between official survey data, the model, and test results that meet norms. The hair assessment standard is somewhat greater than 0.9, whereas GFI and AGFI are lower. Results show the model matches the data and justifies additional research. The data fits the model well with a high CFI and a low RMSEA, allowing for future studies. The results show that the model aligns with the data, enabling examination of interchange, creativity, innovation, low-end disruption, individual and team performance, effective work, and professional employee accountability. Further research may illuminate these crucial organisational success determinants.

Objective 3) To analyze the mediation of the role of employee performance in the relationship between human capital, product innovation and entrepreneurial performance in e-commerce small-medium enterprises.

The study found a significant relationship between EPE, HC, and EP, with HC having the most impact. PI also significantly influences EP. Future research should explore moderating variables and potential mediating variables to better understand the relationship between EPE, HC, PI, and EP. The study highlights the importance of strategic management of human capital and employee performance in e-commerce small-medium enterprises (SMEs) to optimize performance outcomes and achieve success in the competitive e-commerce market.

Objective 4) To analyze the mediation role of employee performance in relation to organizational culture, product innovation on entrepreneurial performance in e-commerce small-medium enterprises.

The study suggests a relationship between organizational culture (OC) and employee performance (EP) in e-commerce small-medium enterprises (SMEs). It emphasizes the need for a comprehensive understanding of EP determinants and suggests that fostering a positive organizational culture can improve employee performance, thereby enhancing entrepreneurial



performance. Therefore, organizations should prioritize fostering a supportive work environment.

The study reveals that human capital, organizational culture, product innovation, and employee performance all positively impact entrepreneurial performance in e-commerce small-medium enterprises. Employee performance mediates the influence of these factors. The findings suggest that a combination of these factors is crucial for enhancing entrepreneurial performance in SMEs, emphasizing the need for investment in human resources and organizational development to drive success in this sector.

Results of qualitative research

Knowledge management, human capital development, and staff training are crucial for organisational success, fostering innovation, adaptability, and effective communication in small and medium-sized enterprises (SMEs) (Figur 1-2).

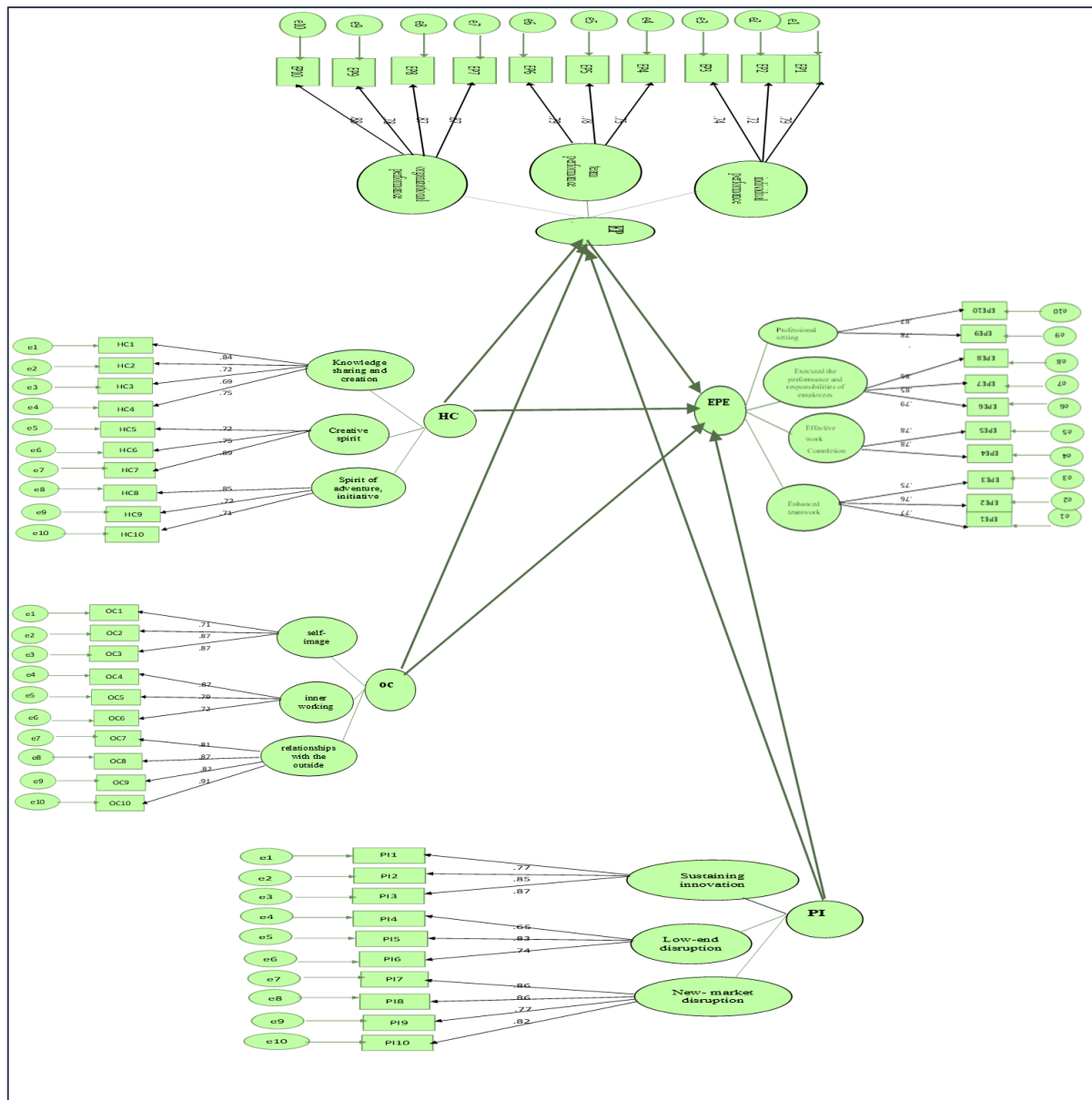


Figure 1 Operation results of Structural equation model (Standardization)

Based on the data, we establish the correlation among key informants, and we can succinctly state its essence as follows:

The integration of qualitative and quantitative data in mixed-methods research necessitates meticulous preparation and analysis. The process necessitates supplementary time and resources, the implementation of specialised analytical techniques, and the assurance of data quality. Additionally, effective communication of mixed-method results is difficult. Although there are some problems, combining qualitative and quantitative research methods can lead to deeper understanding and a more complete picture of complicated phenomena. This can help researchers make important contributions to their fields. By incorporating diverse viewpoints and methodologies, scientists have the ability to reveal latent patterns and



connections that might be imperceptible when employing a singular approach. This may lead to more comprehensive insights and more reliable conclusions about the study's subject.

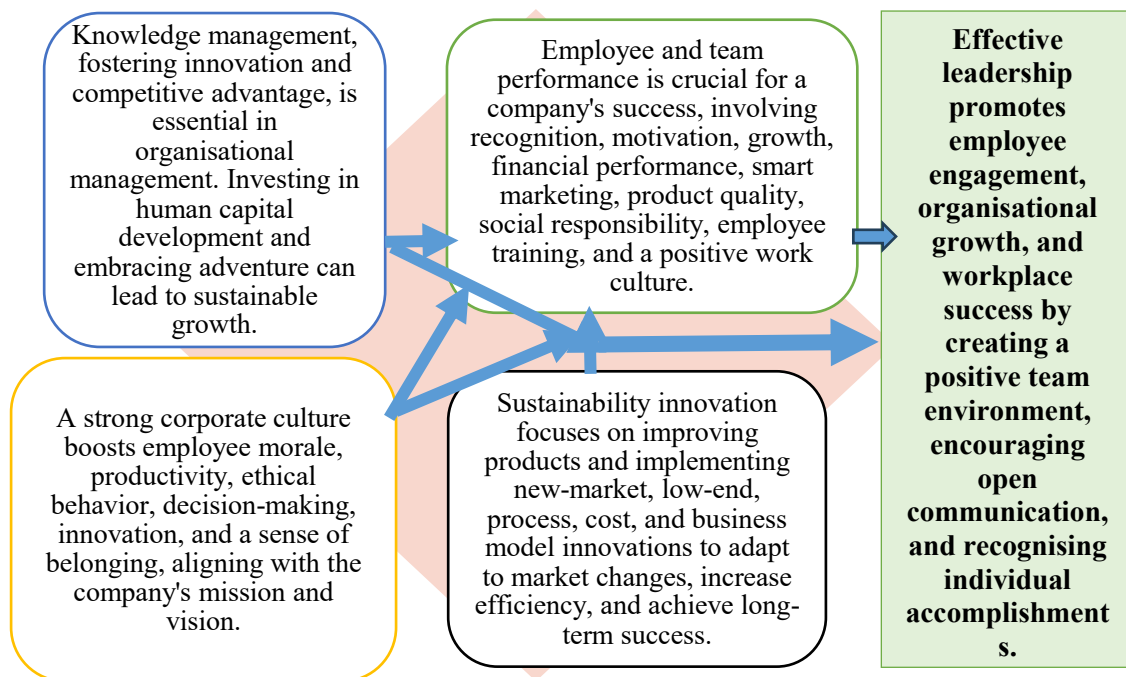


Figure 2 The relationship between human capital, organisational culture, product innovation, employee performance, and SMEs

Research Discussion

The study aims to ascertain how human capital, organisational culture, and product innovation influence entrepreneurial performance in small and medium-sized e-commerce businesses. According to the findings, the study investigates the impact of human capital, organisational culture, and product innovation on entrepreneurial performance in e-commerce small-to-medium firms, highlighting the importance of adventure, self-confidence, information sharing, and ethical values. Ployhart et al. (2014) highlight that organisational success relies on human capital, intellectual capital, and continuous learning, fostering innovation, creativity, adaptability, and a culture of collaboration and diversity.

The study explores the influence of human capital, organizational culture, and product innovation on entrepreneurial performance in e-commerce small-medium enterprises, using KMO and Bartlett tests and structural equation models. The study's findings unequivocally demonstrate a correlation with the research outcomes reported by Lu (2020), Zhao and Li (2021), and HE. Cui (2021) and Li and Jun (2021) provide evidence that corporate culture has a substantial effect on the success and innovation of an organisation. Organizational culture, as a subculture, often mirrors the leader's own culture and receives influence from external cultures. Employees are instrumental in fostering a connection between the organisational



culture and the generation of innovative ideas. Shared conviction in a company's mission, vision, and fundamental principles justifies its achievement.

The study reveals that human capital, organizational culture, and product innovation significantly impact entrepreneurial performance in e-commerce small-medium enterprises, emphasizing the need for employee investment. Performance management enhances employee performance by aligning individual goals with organisational objectives, fostering a culture of continuous improvement, and increasing productivity and success. This is also consistent with the findings of Utin Nina Hermina and Sri Yanthy Yosepha's (2019) study on PT. Trakindo Utama Pontianak, which demonstrated outstanding leadership, motivation, and work discipline, but identified areas for improvement in workplace discipline and monetary benefits. Ching, Shian, Nien, and Huen (2016) describe the relationship between job autonomy, communication, intrinsic motivation, skill flexibility, and job satisfaction in a corporation. It emphasises the necessity of cultivating a diverse workplace, developing an inclusive culture, and encouraging growth, innovation, and productivity. Understanding these variables enables organisations to establish a positive work environment that benefits both people and the organisation.

Knowledge management is crucial for organisational success, fostering innovation and competitiveness. Strategies include staff training, human capital development, and a robust corporate culture. This is also consistent with the findings of the study by Zhao and Ye (2023) explores the impact of MEI policy on SME innovation, revealing that R&D subsidy and tax incentive tools complement each other, but not mutually exclusive. The study by Aiqi Wu, Di Song, Yihui Liu (2022) explores the impact of platform synergy on innovation speed among SMEs as participant complementors on digital platforms. It suggests that platform owners and fellow complementors provide complementary information, while SMEs with different organizational structures and locations may benefit differently. The research also explores the influence of employee performance, organisational culture, and product innovation on new e-commerce companies. Additionally, the study delves into how these factors interact with each other to create a competitive advantage in the rapidly evolving e-commerce industry. It aims to provide insights for Chinese SMEs looking to enhance their competitiveness in the digital marketplace. By understanding the interconnectedness of these factors, businesses can adapt and thrive in an increasingly competitive landscape. This research offers valuable guidance for SMEs seeking to stay ahead of the curve and succeed in the digital economy.

Research Suggestions

The researcher presented the consistent and correlated quantitative and qualitative research results as suggestions for additional academic and managerial benefits. The study explores the impact of employee performance, product innovation, human capital, and organisational culture on Chinese SMEs, focusing on technology integration and an innovative mindset. It provides insights for strategic investments in technology, innovation, and organisational culture for competitiveness. The researcher offers the following recommendations for how to use the information:



1.The findings indicate that a strong organisational culture that encourages innovation and information sharing, paired with a workforce with high levels of human capital and self-confidence, can dramatically improve entrepreneurial success in e-commerce SMEs. The study emphasizes the significance of staff development, fostering a culture of creativity and ethical behavior, and fostering product innovation for a company's success, highlighting the importance of these factors in today's competitive business environment.

2.From research results, found that SMEs must balance tradition and innovation to thrive in the Chinese market, adapting to market trends and customer preferences, and empowering employees for long-term success. In order to innovate and more accurately represent their diverse clientele, businesses should prioritise diversity and inclusion initiatives. Additionally, providing opportunities for professional advancement and growth can increase employee engagement and attract top talent.

3.The findings will guide SMEs in making informed decisions to improve market competitiveness. By analyzing consumer preferences and market trends, SMEs can better understand their target audience and tailor their products or services accordingly. This strategic approach can help SMEs differentiate themselves from competitors and attract more customers. Ultimately, this can lead to increased sales and business growth. By staying attuned to consumer needs and adapting quickly to changes in the market, SMEs can position themselves for long-term success.

4.The study suggests that a strong organizational culture, innovation, and a high human capital workforce can improve entrepreneurial success in e-commerce SMEs. It emphasizes staff development, ethical behavior, and product innovation. Future research should explore the impact of organizational culture on employee engagement and retention, as well as investing in technology and strategic partnerships.

5.Additionally, future studies could explore the impact of organisational culture on employee engagement and retention. Understanding these relationships can provide valuable insights for developing strategies to enhance overall organisational effectiveness. The future research can explore how leadership styles and organisational values impact employee engagement and retention rates, providing a comprehensive understanding of employee attitudes and behaviours.

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