Influence of Entrepreneurship on Enterprise Performance with Enterprise Ambidextrous Innovation as Mediator

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Abstract

The objectives of this study were 1) To study the effect of entrepreneurship on Enterprise performance, 2) To study the effect of entrepreneurship on ambidextrous innovation, and 3) To study the effect of ambidextrous innovation on enterprise performance. This research was Quantitative Research. The conceptual framework of this research was applied to entrepreneurial theory, endogenous and exogenous interpretation of enterprise performance, and ambidextrous theory. The population comprises 1008 middle and senior managers from 252 companies with more than 5%innovation investment. The samples were 291 valid questionnaires, as determined by simple random sampling. The research instrument was SPSS 26 and Amos 24. Statistics used for data analysis were Confirmatory Factor Analysis (CFA) and Structural Equation Model analysis (SEM).

The result of this study found that:1) Entrepreneurship has a significant positive impact on enterprise performance. 2) Entrepreneurship has a significant positive impact on ambidextrous innovation. 3) Exploratory innovation has a significant positive impact on enterprise performance.

Keywords: Entrepreneurship, Ambidextrous Innovation, Enterprise Performance

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Introduction

Over the past four decades, China has experienced a transformative period of reform and opening up, bringing about remarkable economic changes. The role of entrepreneurship in this transformation has been pivotal, with entrepreneurs contributing significantly to the country's economic development. This period has seen a growing recognition of the importance of entrepreneurship, both by the government and society at large. One of the earliest acknowledgments of the importance of entrepreneurship came in 2002 when the International Symposium on "Enterprise System, Entrepreneurship, and Urban Economic Linkage" was held in Shanghai. This event brought together scholars and entrepreneurs from various sectors to discuss the critical role of entrepreneurship in economic development. 2004, during the National Entrepreneur Activity Day, Zhang Yanning, the executive vice president of the China Enterprise Confederation and the China Entrepreneurs Association, emphasized the need to promote innovation and entrepreneurship. He encouraged entrepreneurs to strive for excellence in their endeavors (Wu & Hu, 2021).

The significance of entrepreneurship was further highlighted at the 2010 Annual Meeting of Chinese Business Leaders. Renowned Chinese economist Xu Xiaonian underscored the necessity of bringing enterprises back to the forefront of economic activity and revitalizing entrepreneurship as a critical theme. Premier Li Keqiang introduced the concept of "mass entrepreneurship and innovation" at the 2014 Summer Davos Conference. This idea was reiterated in the 2015 Chinese Government Report, signaling a solid governmental endorsement of entrepreneurship as a driver of economic growth (Bhupatiraju et al., 2012).

In 2017, the central government issued the "Opinions on Creating an Environment for the Healthy Growth of Entrepreneurs, Promoting Excellent Entrepreneurship, and Better Playing the Role of Entrepreneurs." This document underscored the crucial role of entrepreneurs in economic activities and called for creating a conducive environment for their growth, promoting excellent entrepreneurship, and enhancing their role in the

economy. The 34th meeting of the Central Leading Group for Comprehensively Deepening Reform in April 2017 further emphasized the importance of exploring the characteristics and typical cases of excellent entrepreneurship. It highlighted the need to carry forward the spirit of entrepreneurship and to create a team of outstanding entrepreneurs. On September 25, 2017, the CPC Central Committee and the State Council issued a document to all levels of government, marking the first time in Chinese history that such a comprehensive directive on entrepreneurship was given. This document aimed to create a favorable environment for entrepreneurs' healthy growth and promote excellent entrepreneurship (Xie et al., 2018).

The 19th National Congress of the Communist Party of China reiterated the significance of entrepreneurs and entrepreneurship in its documents. Chinese President Xi Jinping has consistently emphasized the vital role of entrepreneur groups in national development. He has advocated for promoting entrepreneurship to enable enterprises to contribute more significantly to economic development and build a strong foundation for economic growth.

Promoting entrepreneurship is essential in light of the complex and challenging domestic and international development environment. It is crucial to integrate enterprise development with national prosperity and the well-being of the people, thereby making more significant contributions to China's economic and social development (Zahra, 2012). Therefore, the importance of entrepreneurs and entrepreneurship in contemporary Chinese society is undeniable. Following the issuance of the "Opinions of the CPC Central Committee and the State Council on Creating an Environment for the Healthy Growth of Entrepreneurs, Promoting Excellent Entrepreneurship, and Better Playing the Role of Entrepreneurs," all provinces, municipalities, and autonomous regions in China have released their own "Implementation Opinions" on the subject. There is a growing focus and emphasis on entrepreneurship across the country.

Notable events that have taken place since then include the Foshan Entrepreneur Conference on March 13, 2022. At this conference, Zheng Ke, Secretary of the Foshan Municipal Party Committee, urged entrepreneurs to deeply study and implement President Xi Jinping's essential expositions on promoting the spirit of entrepreneurship. He called for collaboration between the government and enterprises to implement the new development concept in all aspects of enterprise development strategy, operation, and management. The goal is to show a new atmosphere and achievements in the high-quality development leader of local cities and to greet the victorious conference of the 20th National Congress of the Communist Party of China with outstanding results. The 19th China Enterprise Development Forum Promoting Entrepreneurship Summit in the New Era was held on July 21, 2022. The summit focused on "inheriting the excellent Chinese culture and carrying forward the entrepreneurship of the new era." Guests and entrepreneur representatives discussed the implementation of General Secretary Xi Jinping's important speech at the entrepreneur forum. They advocated for establishing entrepreneurship in the new era, promoting excellent traditional culture, innovative enterprise culture, honest enterprise culture, corporate brand culture, and entrepreneurship to achieve higher quality and a higher level of development. The Tianjin 2022 China Entrepreneurs Conference, held on August 2, 2022, emphasized the need to follow the general trend of the times, shoulder the vital task of strengthening the country, carry forward entrepreneurship, and support high-quality development.

Therefore, from the statement and significance of the economic situation, the researcher used ambidextrous innovation as an intermediary to study the relationship between entrepreneurship and enterprise performance. It is hoped that based on the ambidextrous framework of exploratory and exploitative ambidextrous innovation, the impact of entrepreneurship on enterprise performance will be explored in depth to provide management reference for promoting enterprise performance,

enhancing regional innovation strength, and improving the construction of a national innovation ecosystem.

Research objectives

1. To study the effect of entrepreneurship on enterprise performance.

2. To study the effect of entrepreneurship on ambidextrous innovation.

3. To study the effect of ambidextrous innovation on enterprise performance.

Research Hypothesis

1. Hypothesis of the relationship between entrepreneurship and enterprise performance:

H1: Entrepreneurship has a significant positive impact on enterprise performance;

2. Hypothesis of the relationship between entrepreneurship and ambidextrous innovation:

H2: Entrepreneurship has a significant positive impact on exploratory innovation;

H3: Entrepreneurship has a significant positive impact on exploitative innovation;

3. Hypothesis of the relationship between ambidextrous innovation and enterprise performance:

H4: Exploratory innovation has a significant positive impact on enterprise performance;

H5: Exploitative innovation has a significant positive impact on enterprise performance.

Literature review

The concept of entrepreneurship

The concept of entrepreneurship has evolved significantly since its first academic introduction by Cantillon in 1775. He defined an entrepreneur as someone who can exploit unrecognized profit

opportunities to achieve business success. Following Cantillon, various scholars have expanded on this definition, each adding new dimensions to the understanding of entrepreneurship. Say (1803) viewed entrepreneurs as agents who seek product value by combining production means and acting as a "coordinator" to transfer resources from lower to higher productivity areas. Marshall (1890) considered entrepreneurs to be coordinators and intermediaries between buyers and sellers, organizing production factors to provide consumers with final products. Knight (1921) defined entrepreneurs as decision-makers in uncertain environments, capable of obtaining excess profits through correct decisions and bearing the risk of decision failure.

A milestone in the academic discussion of entrepreneurship came with Schumpeter (1934), who introduced the innovation theory. He viewed entrepreneurship as a series of behaviors aimed at creating economic value and managing the reallocation of economic resources. This definition implies three processes: opportunity discovery, resource integration, and economic value creation. Subsequent scholars shifted focus from personal traits to the behavior of new business creation. For example, McClelland (1961) proposed that entrepreneurship is behavior exhibited under high achievement motivation, while Collins & Moore (1964) found that family background significantly influences entrepreneurship.

Drucker (1985) defined entrepreneurship as an innovative process of identifying, creating, and exploiting new products or services to generate wealth. Stevenson et al. (1985) argued that studying entrepreneurship from a psychological perspective is doomed to fail, as entrepreneurship should be seen as pursuing opportunities beyond the current scope of resource applications. Gray et al. (2006) regarded entrepreneurship as a solution to economic depression in many countries. Liu (2001) believed that entrepreneurship encompasses both a spiritual meaning, representing innovative ways of thinking and doing, and a substantive meaning, representing the discovery of opportunities and organization of resources to establish a new company.

In summary, entrepreneurship refers to specific spiritual characteristics of entrepreneurs, such as pioneering, innovation, continuous learning, risk-taking, dedication, and risk control. These characteristics provide impetus and support for technological innovation, resource allocation, and enterprise development.

The concept of enterprise performance

There is no definition of enterprise performance in academia (Li, 2008). Zhong & Shi (2002,15) concluded that by combining the research literature on enterprise performance, there are mainly the following views. The first view focuses on the results of enterprise performance, such as Bemardin et al. (2011) believed that enterprise performance is related to customer satisfaction, strategic goals, investment amount, and other work results, and thus it is believed that enterprise performance is a result. The second view focuses on the behavioral aspects of enterprise performance. Murphy & Cleveland (1991, 172) defined the concept of performance as "a set of actions related to the goals of the organization or organizational unit in which a person works," and Olian & Rynes (1995, 303) stated that "performance is not a consequence or result of the action, it is action in itself." He also believed that performance is the actual behavior of people that can be observed and that performance is synonymous with behavior. The third view combines outcomes and behavior. As Brumbrach (1988) argued, behavior is manifested by a worker by putting a task into practice. Behavior is not only a tool to achieve results but also the result of the mental and physical effort expended to complete the work task. Since he believes that a distinction can be made between behavior and outcome, enterprise performance refers to behavior and outcome.

Based on the research's purpose and combined with previous scholars' views, this paper defines enterprise performance as a general term for various related results obtained in enterprises' production and operation process to achieve the set goals. Specifically, it refers to the operating benefits and operator performance generated by an enterprise during a certain period of operation, which can be measured by many

indicators such as enterprise profitability, solvency, asset operation level, and future development ability of the enterprise.

The concept of ambidextrous innovation

In organizational research, scholars have proposed building an ambidextrous organization to ensure the persistence of competitive advantage. Duncan (1976) took the lead in introducing the concept of the "ambidextrous element" in management, stating that organizations should have two different capabilities to deal with increasingly dynamic and complex environments. Tushman and O'Reilly (1996) successively published articles in California Management Review, expounding the concept of "ambidextrous organization," and proposed that such enterprises not only have the ability to expand new products and services but also can make full use of existing resources and believed that in the process of innovation activities, enterprises must make adjustments according to different stages, and carry out different forms of innovation in different business units at the same time to maintain their competitive advantages. Enterprises need to gain short-term efficiencies by emphasizing control and stability and long-term efficiencies through innovation and risk-taking.

March (1991) expounded the theoretical connotation of the "ambidextrous element" for the first time in his article "Exploration and Exploitation in Organizational Learning." It defined the process of developing existing capabilities and exploring potential capabilities of organizations as an organizational learning behavior. The concepts of exploratory learning and exploitative learning are clarified, emphasizing the need to make full use of existing knowledge to improve certainty and efficiency and to explore new knowledge to promote change, the "adaptive process" based on "exploratory learning" and " exploitative learning" is the critical factor to promote the acquisition and maintenance of competitive advantages of the enterprise. Since then, "Exploration" and "Exploitation" have gradually become the core content and the two most essential constructs in ambidextrous research, and most of the existing literature to measure ambidextrous is based on these two dimensions in

different ways. Later, Benner & Tushman (2003) introduced ambidextrous into innovation activities, and ambidextrous innovation was born from this. It refers to the enterprise's simultaneous pursuit of exploratory and exploitative innovation. The main difference between exploratory and exploitative innovation lies in the different innovation methods and enterprise knowledge base. Among them, exploratory innovation is a large-scale, radical form of innovation. It is a brand-new model based on the company's development of new markets and research and development of new products. It is a subversion of the existing knowledge base and product forms to create new products and knowledge forms. Exploitative innovation is a relatively conservative form of innovation, which refers to re-innovation based on existing product forms and knowledge, carrying out expansion and development as an investment method with "refinement, selection, replication and promotion" as the innovation goal, bringing enterprise innovation behavior to related fields and industries, to reduce related operating costs, improve efficiency, and to provide better service for customers by using this.

Although exploratory innovation has the characteristics of high risk and a long cycle, it can help enterprises quickly break through the existing knowledge base and innovation structure and quickly find market-sensitive points and potential needs. Once exploratory innovative products appear, the competitive advantage of new products in the market is more pronounced, and it is difficult for competitors to imitate and copy in the short term, which helps enterprises form core competitiveness. Therefore, exploratory innovation pioneeringly provides development opportunities for enterprises and can directly improve enterprise performance. Compared with exploratory innovation, exploitative innovation has lower risks, and enterprises face less operating pressure when investing in exploitative innovation. Exploitative innovation can improve the company's product knowledge base and functional utility in a short time, enrich product forms, meet current consumer needs, and enhance corporate competitiveness in a relatively short time. In addition, from the perspective of the company's internal management, exploitative

innovation can improve the company's internal production process in the short term, reduce unnecessary losses, optimize the company's internal operations and management, and improve enterprise performance.

Research Framework

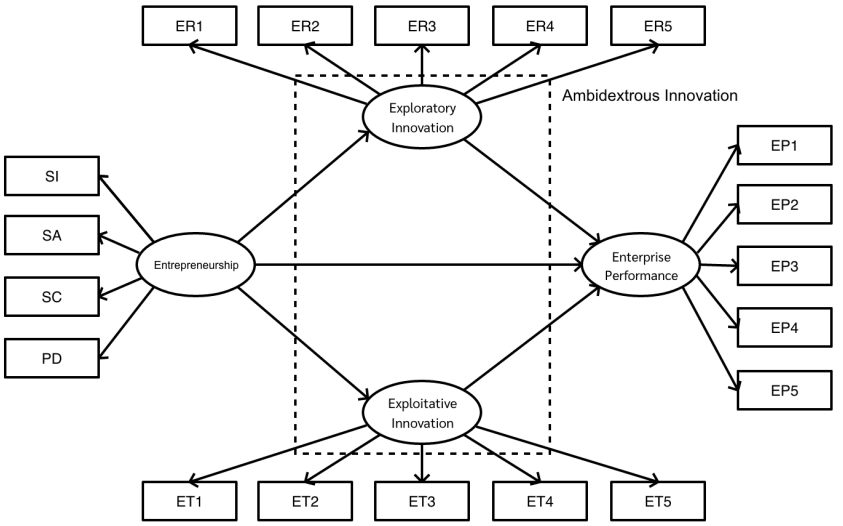

Figure 1 Research Framework

Research Methodology

Population and Sample Size

This study aimed to explore the influence of entrepreneurship on enterprise performance, considering the mediating effect of ambidextrous innovation. A total of 338 questionnaires were distributed to 1008 potential respondents across 12 cities in China, targeting enterprises with active innovation activities. The respondents primarily included MBA students with a business management background and middle and senior managers with relevant work experience. The survey employed classroom distribution and online methods to ensure a high response rate and effective data collection. After filtering out incomplete and inconsistent responses, 291 valid questionnaires were obtained, resulting in an 86.1% response rate. The respondents represented various industries, including electronic technology, trade, service, biopharmaceutical, education and training, science and technology, construction, communications, and

machinery manufacturing. The study's findings are expected to provide insights into the relationship between entrepreneurship, ambidextrous innovation, and enterprise performance, contributing to a better understanding of the dynamics within innovative enterprises.

Measurement of Ambidextrous Innovation

The mediating variable in this study is ambidextrous innovation. Yang & Lai (2012,421) pointed out that ambidextrous innovation is an enterprise's ability to combine exploratory and exploitative innovations. Among them, exploratory innovation mainly refers to adopting new methods, technologies, businesses, and processes (Gu& Wei, 2015). In contrast to exploratory innovation, exploitative innovation emphasizes enhancing skills, business, market development, etc., based on existing technologies (March, 1991). In pursuit of healthy and sustainable development, enterprises must continuously develop new products and services, break through various technical barriers, and open up innovation points. Exploratory and exploitative innovations are essential for enterprises to face an uncertain environment, build competitive advantages, and obtain sustainable development. In their research, he & Wong (2004) distinguished between exploratory and exploitative innovation and analyzed their effects on firm sales growth. Based on the measurement indicators of He& Wong, this paper uses a 5-point scale with ten items to measure the enterprise's ambidextrous innovation, namely exploratory innovation and exploitative innovation. It explores the influence of the enterprise's adoption of ambidextrous innovation on enterprise performance. Based on the maturity scale, this paper measures the ambidextrous innovation of enterprises, as shown in the Table 1

Variable	Number	Measurement Item	Sources
Exploratory Innovation	EI1	Try to use new technologies that are not yet mature and have some risks	He & Wong (2004)
	EI2	Try to take risks to develop new technologies and products.	

	EI3	Try to open up entirely new market segments that do not yet have relevant marketing experience.	
	EI4	Try business strategies and management methods that other companies do not adopt in the same industry.	
	EI5	Become a creator of new processes and technologies.	
Exploitative Innovation	EI6	Adapt existing technologies to meet market needs	He & Wong (2004)
	EI7	Efforts will be made to improve the applicability of existing technologies in several related fields.	
	EI8	Use existing technologies to increase the functionality and variety of your products/services.	
	EI9	Refine the experience of existing business and apply it to the current business.	
	EI10	Make improvements in systems, work processes, etc.	

Table 1 Scale of Ambidextrous Innovation

Result

statistical analysis is carried out on all items to test whether the sample data meets the requirements of the research hypothesis, including mean value, standard deviation, skewness, and kurtosis.

Abbr.	Minimum	Maximum	Mean Value	S.D.	Skewness	Kurtosis
SI1	2	5	4.13	0.662	-0.221	-0.453
SI2	2	5	4.04	0.647	-0.116	-0.339
SI3	2	5	4.18	0.698	-0.388	-0.45

SI4	2	5	4.19	0.727	-0.366	-0.853
SI5	3	5	4.23	0.697	-0.341	-0.918
SA1	2	5	4.11	0.653	-0.41	0.462
SA2	2	5	4.25	0.675	-0.48	-0.211
SA3	2	5	4.25	0.685	-0.426	-0.573
SA4	2	5	4.19	0.657	-0.372	-0.102
SA5	3	5	4.21	0.635	-0.21	-0.627
SC1	2	5	4.16	0.687	-0.472	0.122
SC2	2	5	4.14	0.652	-0.224	-0.374
SC3	2	5	4.12	0.695	-0.285	-0.474
SC4	2	5	4.1	0.76	-0.353	-0.643
SC5	2	5	4.19	0.654	-0.284	-0.392
PD1	2	5	4.18	0.629	-0.323	0.17
PD2	2	5	4.15	0.62	-0.285	0.273
PD3	2	5	4.16	0.601	-0.173	0.072
PD4	2	5	4.15	0.603	-0.266	0.478
PD5	3	5	4.19	0.577	-0.031	-0.264
ER1	2	5	4.11	0.529	-0.165	1.717
ER2	2	5	4.15	0.589	-0.247	0.66
ER3	2	5	4.13	0.61	-0.169	0.007
ER4	3	5	4.1	0.605	-0.047	-0.301
ER5	2	5	4.13	0.596	-0.246	0.572
ET1	2	5	4.17	0.578	-0.131	0.296
ET2	2	5	4.16	0.616	-0.205	-0.077
ET3	2	5	4.17	0.625	-0.226	-0.163
ET4	2	5	4.15	0.553	-0.066	0.629
ET5	2	5	4.16	0.589	-0.151	0.189
EP1	2	5	4.19	0.569	-0.229	0.9
EP2	2	5	4.16	0.568	-0.104	0.42
EP3	3	5	4.19	0.557	0.041	-0.123
EP4	2	5	4.18	0.53	0.019	0.812
EP5	3	5	4.16	0.538	0.113	0.097

Table 2 Descriptive Statistical

The result of a Model tested

Path	Estimate	S.E.	t	P
ET⟵EN(a2)	0.810	0.081	8.799	0.000
ER⟵EN(a1)	0.834	0.080	8.837	0.000
EP⟵ET(b2)	0.458	0.118	4.455	0.000
EP⟵ER(b1)	0.255	0.132	2.293	0.000
EP⟵EN(c)	0.281	0.156	1.824	0.000
Test of Goodness for Fit	χ^2 /(df)=2.578			
	RESEA=0.075			
	SRMR=0.047			
	CFI=0.932			
	TLI=0.921			

Table 3 Goodness for Fit of Holistic Structure Model

In this research, Amos 24 software is used to conduct multiple mediation analyses of the SEM model, and the Bootstrap method is used to test multiple mediation effects. In this paper, the SEM model is used to carry out parallel mediation analysis of the mediation model, which can not only handle latent variables and explicit variables synchronously but also analyze the relationship between multiple dependent variables, independent variables, and intermediate variables synchronously (Wen & Ye, 2014, p. 731). As a resampling method, the Bootstrap method has no requirement for the distribution of intermediary effect and can effectively solve the problem of the non-normal distribution of intermediary effect. The specific steps are as follows: Limit Bootstrap to take the original sample as the sampling population, conduct repeated sampling with multiple iterations, extract Bootstrap samples, and achieve the acquisition of new statistics. The estimated product of coefficients of the Bootstrap sample of the new statistic is sorted in the form from smallest to largest. The 2.5% percentile and the 97.5% percentile constitute a 95% confidence interval of a*b. If 0 is not in the confidence interval, the product of coefficients is significant; that is, the mediation effect is significant (Zhu, 2018).

The analysis confirmed that the overall structural model of entrepreneurship, ambidextrous innovation, and enterprise performance fit well. It analyzed the relationship between entrepreneurship, exploratory innovation, and exploitative innovation and the influence of exploratory innovation and exploitative innovation on enterprise performance. Next, this paper will run the SEM and use the Bootstrap method to test the multiple mediation effects. Table 4 lists the results.

Path	Estimate	Lower	Upper	P-Values
EP⟵ER⟵EN(a_1b_1)	0.215	0.089	0.419	0.007
EP⟵ET⟵EN(a_2b_2)	0.375	0.242	0.562	0.000
$a_1b_1+a_2b_2$	0.589	0.388	0.875	0.000
$a_1b_1-a_2b_2$	-0.160	0.029	0.394	0.000

Table 4 SEM analysis results of multiple mediating effects of ambidextrous innovation on entrepreneurship and enterprise performance

Analysis of the mediating effect of exploratory innovation. The overall SEM results above (Table 3) showed that entrepreneurship had a significant positive impact on exploratory innovation, and exploratory innovation had a significant positive impact on enterprise performance. However, it is still necessary to use the Bootstrap test coefficient product (H0: ab=0) to test the intermediary effect further. If it is significant, the mediating effect of exploratory innovation on enterprise performance is significant; otherwise, the mediating effect is not significant. From the Estimate in Table 4.11, the estimated mediating effect (a1b1) of the exploratory innovation is 0.215. Its error-corrected bootstrap confidence interval under 95% confidence is (0.089, 0.419), excluding zero value, and P value is 0.007. It shows that exploratory innovation has a significant mediating effect on entrepreneurship and enterprise performance.

Analysis of the mediating role of exploitative innovation. The results of the overall structure model above show that entrepreneurship has a significant positive impact on exploitative innovation, and

exploitative innovation also has a significant positive impact on enterprise performance. According to the Estimate in Table 4.11, the estimated mediating effect (a2b2) of exploitative innovation is 0.375, and its error-corrected bootstrap confidence interval under 95% confidence is (0.242, 0.562), excluding zero values, $p < 0.001$. It shows that exploitative innovation has a significant mediating effect on entrepreneurship and enterprise performance. Then, the mediating effect of ambidextrous innovation on entrepreneurship and enterprise performance will be analyzed. From the perspective of the total mediating effect, the estimated value of a1b1+a2b2 is 0.589, and its error-corrected bootstrap confidence interval under 95% confidence is (0.388, 0.875), excluding the zero value, $p < 0.001$, indicating that the multiple mediating effect of ambidextrous innovation is significant. After introducing the intermediary variable of ambidextrous innovation into the SEM, there is still a significant linear relationship between entrepreneurship and enterprise performance; the standardized path coefficient is 0.281(direct effect). The standardized path coefficient of the intermediary effect of ambidextrous innovation on enterprise performance is 0.589 (indirect effect), and the total intermediary effect is 67.7%. So, ambidextrous innovation plays a partial mediating role in the relationship between entrepreneurship and enterprise performance.

From the comparison among specific mediating effects, the difference a1b1-a2b2 is -0.160, and its error-corrected bootstrap confidence interval under 95% confidence is (0.029, 0.394), excluding zero. This indicates that the mediating effect of exploitative innovation is significantly higher than exploration innovation's. The mediating effect of ambidextrous innovation is mainly realized through exploitative innovation.

Results of data analysis

This paper investigates innovative enterprises, conducts correlation analysis on the relationship between entrepreneurship, ambidextrous innovation, and enterprise performance, and validates relevant research

hypotheses. Then, using the results from Table 4.10, the hypotheses were tested to see if each latent variable affects the others.

H1: Entrepreneurship has a significant positive impact on enterprise performance.

Table 3 shows that the path coefficient was 0.281 with a P-value <0.001; this confirmed that entrepreneurship latent variables in the model positively impacted enterprise performance statistically significantly at 0.001.

H2: Entrepreneurship has a significant positive impact on exploratory innovation.

Table 3 shows that the path coefficient was 0.834 with a P-value <0.001; this confirmed that entrepreneurship latent variables in the model positively impacted exploratory innovation statistically significantly at 0.001.

H3: Entrepreneurship has a significant positive impact on exploitative innovation.

Table 3 shows that the path coefficient was 0.810 with a P-value <0.001; this confirmed that entrepreneurship latent variables in the model positively impacted exploitative innovation statistically significantly at 0.001.

H4: Exploratory innovation has a significant positive impact on enterprise performance.

Table 3 shows that the path coefficient was 0.281 with a P-value <0.001; this confirmed that Entrepreneurship latent variables in the model positively impacted enterprise performance statistically significantly at 0.001.

H5: Exploitative innovation has a significant positive impact on enterprise performance.

Table 3 shows that the path coefficient was 0.458 with a P-value <0.001; this confirmed that exploitative innovation latent variables in the model positively impacted enterprise performance statistically significantly at 0.001.

NO.	Hypothesis	Results

H1	Entrepreneurship has a significant positive impact on enterprise performance.	Supported
H2	Entrepreneurship has a significant positive impact on exploratory innovation.	Supported
H3	Entrepreneurship has a significant positive impact on exploitative innovation.	Supported
H4	Exploratory innovation has a significant positive impact on enterprise performance.	Supported
H5	Exploitative innovation has a significant positive impact on enterprise performance.	Supported

Table 5 Summary of research hypothesis results

Conclusion

This research investigates the relationship between entrepreneurship and enterprise performance, with ambidextrous innovation as a mediating factor. The study collected 291 valid questionnaires, conducted reliability and validity tests on the scales for entrepreneurship, ambidextrous innovation, and enterprise performance, and utilized Structural Equation Modeling (SEM) for analysis. The results revealed that entrepreneurship positively impacts both exploratory and exploitative innovation. In turn, these innovations significantly enhance enterprise performance, with exploitative innovation having a more substantial effect. Additionally, the study found that ambidextrous innovation partially mediates between entrepreneurship and enterprise performance, with the mediating effect of exploitative innovation being more pronounced than that of exploratory innovation. These findings suggest that fostering entrepreneurship and ambidextrous innovation can significantly improve enterprise performance.

Discussion

This study theoretically analyzed the relationship between entrepreneurship, ambidextrous innovation, and enterprise performance,

constructing a theoretical model with entrepreneurship as the independent variable and ambidextrous innovation as the mediating variable influencing enterprise performance. The empirical test was conducted through a questionnaire survey, leading to the following conclusions:

1. **Entrepreneurship's Role in Enterprise Growth:** Entrepreneurship is a crucial driver of enterprise development, with higher levels of entrepreneurship leading to better enterprise performance (Zeng et al., 2015, p. 121). The study found that the Spirit of Innovation, Spirit of Adventure, Spirit of Cooperation, and Professional Dedication all significantly promote enterprise performance. These aspects of entrepreneurship encourage enterprises to innovate, take risks, cooperate, and dedicate themselves to their business, thereby enhancing their performance.

2. **Entrepreneurship's Impact on Ambidextrous Innovation**: Entrepreneurship positively influences exploratory and exploitative innovation. The Spirit of Innovation and Spirit of Adventure enables enterprises to engage in exploratory innovation by stimulating creativity and risk-taking. Similarly, these entrepreneurial traits foster exploitative innovation by encouraging resource acquisition and an open attitude toward new ideas and technologies (Yuan et al., 2012, p. 36).

3. **Ambidextrous Innovation's Role in Enterprise Performance**: Both exploratory and exploitative innovation positively affect enterprise performance, with exploitative innovation having a more substantial impact. Exploratory innovation allows enterprises to adapt to market demands and optimize internal operations quickly. In contrast, exploitative innovation helps enterprises break through existing knowledge bases and develop products with competitive advantages, thereby directly improving performance.

4. **Mediating Role of Ambidextrous Innovation**: Ambidextrous innovation serves as an essential intermediary factor between entrepreneurship and enterprise performance. Exploratory and exploitative innovation mediate the relationship between

entrepreneurship and performance, with exploitative innovation playing a more significant mediating role. Entrepreneurs drive innovation by perceiving new opportunities and developing new business models to seize them, ultimately enhancing enterprise performance (Teece, 2018, p. 40).

In conclusion, this study highlights the importance of entrepreneurship in promoting ambidextrous innovation and, in turn, improving enterprise performance. It provides a theoretical and empirical basis for understanding the dynamic interplay between entrepreneurship, innovation, and performance in the context of enterprise growth.

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