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# A STUDY ON CORE FACTORS OF INNOVATIVE ENTERPRISES AND ENTERPRISES GROWTH IN ZHEJIANG PROVINCE

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#### **Abstract**

The 2020 Innovative Nation Development Forum, the White Paper (Report) on Enterprise Innovation Development in 2020, the China Enterprise Growth Report (2020) and the China Enterprise Innovation Development Report (2018) all emphasize that innovation is the soul of a nation's progress, the inexhaustible power source of a country's prosperity and the deepest national endowment of the Chinese nation. In the fierce international competition, only the innovator advances, only the innovator is strong, only the innovator wins. Enterprises are the basic elements of the economic system, and the growth of innovative enterprises is an important part of the country of innovators in China, which has become a common concern of all the people. Therefore, this study focuses on the core factors and growth of innovative enterprises in Zhejiang Province, thereby providing meaningful guidance for the growth of innovative enterprises in Zhejiang Province and China. Main content. 1. Collecting and studing relevant papers, articles and management theories on the growth of innovative enterprises, and identifying areas where there is a lack of research or where further research is needed as the theoretical basis and entry point for this study. 2. Defining the connotation of innovative enterprises and the growth of innovative enterprises, and sorting out, summarizing and analyzing the core factors affecting the growth of innovative enterprises, which constitute the basis of this research. 3. Proposing hypotheses related to the impact on the growth of innovative enterprises and developing a research framework for the growth of innovative enterprises; 4. Combined with the relevant data of innovative enterprises in Zhejiang province and the research results of related literatures, the measurement index system of innovative enterprises growth is proposed, and the empirical analysis method used in the research is introduced, and then the proposed research hypothesis and research model are verified. Summarizing the main findings, enlightenments on the study and recommendations of the full text.

**Keywords:** Core factors; Innovative enterprise; Enterprises growth

# Introduction

#### **Background of Study**

How to promote the healthy and stable growth of enterprises, actively explore the objective law of enterprise growth, and find the influencing factors of enterprise growth is not only an urgent problem for the industry, but also a new historical topic worthy of all-round systematic research in the theoretical circles. The growth of a firm is a stochastic process with complex influences (Gibrat, 1931). In addition to land, labour and capital, the economist Marshall (1890) identified a fourth factor of production for enterprises: industrial organization. The concepts of "internal economy" and "external economy" were used to illustrate how changes in the fourth factor of production lead to an increase in the output of a firm. On this basis, domestic and foreign scholars mainly conduct relevant theoretical research from three perspectives: exogenous growth, endogenous growth and enterprise evolution. (Zhou et al., 2020; Chen et al., 2020; Chen et al., 2020)

The exogenous growth theory is represented by the industrial organization theory school (Marshall, 1890; Coase, 1937; Porter, 1980), which argues that the external environment of a firm and its position in the environment are the main factors influencing the growth of a firm, and that the choice of industrial position is the key to the growth of a firm. Exogenous variables such as institutional environment, market supply and demand, production technology and cost structure determine enterprise productivity. The theory of endogenous growth is based on the resource-based view (Wernerfelt, 1984) and the competence theory of the corporation (Prahalad and Hamel, 1990), which argues that the main factors influencing growth come from within the firm, that managerial capability determines the boundaries of the firm (Penrose, 1959), and that the internal resources owned by an enterprise are a key factor for the growth of the enterprise, and the allocation of internal resources determines the enterprise productivity, which is the dynamic evolution process of the organization of each subsystem within the enterprise (Liu Jinfei, 2018).

At present, although the research on exogenous growth theory has been mature and operable in terms of theoretical research methods and analytical tools, the exogenous growth theory only focuses on the influence of external factors on the growth of the firm and emphasizes the determining role of market structure characteristics on the growth of the firm (Li Junbo et al., 2011), but ignores the weak explanatory power of this theory to the actual situation, and fails to explain the big difference in the development status of enterprises under the same external conditions in reality with the theory of exogenous growth of enterprises. The theory of firm

evolution, on the other hand, restricts firms to producing a given product under a given process (Gao Huai and Xu Erming, 2004), ignores that firm growth is an innovative process, and limits the further development of the theory due to its lack of operational research tools. The theory of endogenous growth of enterprises, represented by the study of resources and competences, strengthens the importance of endogenous growth factors of enterprises, which is consistent with the viewpoint of materialist dialectics that internal causes are the basis for the change and development of things and the decisive factor for the change of things. But the existing research has not conducted in-depth studies on how internal resources affect the growth of enterprises, and ignores the role of external factors in the growth of enterprises.

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The 2020 Innovative Nation Development Forum and the White Paper (Report) on Enterprise Innovation Development in 2020 stated that innovation is the soul of a nation's progress, the inexhaustible power source of a country's prosperity and the deepest national endowment of the Chinese nation. In the fierce international competition, only the innovator advances, only the innovator is strong, only the innovator wins. General Secretary Xi Jinping said. "To insist on innovation-driven development is to place innovation at the center of the national development strategy and to make innovation common practice throughout the nation."

Innovation is the main theme of development in the new era, and it is the number one driving force leading development and the strategic support for building a modern economic system. The development of economic globalization has led to an increase in the competitive pressure faced by enterprises, and the competition between economic entities has gradually evolved into a competition between knowledge, technology and innovation, with innovation becoming the dominant way for enterprises, industries and countries to build sustainable advantages. Although China has become the second largest economy in the world and has entered the ranks of a major economic power, there is still a big gap between China and developed countries in terms of scientific and technological innovation level and innovation capacity. China's independent innovation capacity still needs to be improved, and China still faces severe international and domestic situations. It has become a general consensus among the government, industry, academia and enterprises on how to improve the capability of independent innovation and realize the transformation of innovation-driven economic development mode. The report of the 19th National Congress of the Communist Party of China (CPC) emphasizes that it is of great and farreaching significance to accelerate the building of an innovative country as a strategic initiative in the overall context of modernization, firmly implement the innovation-driven development strategy, strengthen the position and role of innovation as the primary driving force, and highlight the importance of scientific and technological innovation to lead comprehensive innovation.

According to data published by Fortune Magazine in 2016, the average lifespan of the world's top 500 companies is 64.55 years. Among them, the country with the highest average life expectancy is the United Kingdom with 111.19 years; followed by France with 98.88 years. The average life expectancy of American companies is 84.64 years, that of Japanese companies is 76.25 years, and that of Chinese companies is only 33.37 years. In all corporate data, the average

life span of large American companies is about 40 years, and the average life span of small Chinese companies is 8 years. The average lifespan of large enterprises and SMEs in China is 7-9 years and 2.5 years, respectively.

There are still some outstanding problems in the growth of innovative companies, and there are many aspects worthy of thought and research from the perspective of both the theoretical and practical backgrounds.

The questions focused on in this paper are: What impact does the core factors, core culture, innovation capabilities, and innovation resources of an enterprise have on the growth of innovative enterprises in Zhejiang Province? The aim is to provide meaningful guidance for the growth of innovative enterprises in Zhejiang Province and China.

#### **Problem Statement**

To accelerate the building of an innovative country, we should aim at the world's scientific and technological frontier, strengthen basic research, and achieve forward-looking basic research and major breakthroughs in original achievements. The growth of innovative enterprises is not only an integral part of China's innovative country, but also a microeconomic foundation for improving China's independent innovation ability to realize the transformation of economic development pattern. It is an important and urgent measure to enhance the independent innovation capability of innovative enterprises and to promote the growth of innovative enterprises in the international and domestic environment.

Based on the above theoretical and practical background and in-depth research and analysis of the general trend of enterprise innovation development, experts and scholars have conducted many studies from different historical periods and a certain perspective, all of which have their limitations.

Therefore, how to define innovative enterprises? What are the dimensions of the connotation and core factors of the growth of innovative enterprises? What is the relationship between the core factors and the growth of innovative enterprises? These require further in-depth theoretical and empirical research.

#### **Research Question**

This paper focuses on the following questions based on the research background, problem statement and logical approach to the study.

Question 1. How does core culture influence the growth of innovatve enterprises in Zhejiang Province?

Question 2. How does innovation resources influence the growth of innovatve enterprises in Zhejiang Province?

#### **Research Objective**

According to the research questions in this article, the research objectives are as follows:

Objective 1. The impact of core culture on the growth of innovative enterprises in Zhejiang Province.

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Objective 2. The impact of innovation resources on the growth of innovative enterprises in Zhejiang Province.

#### LITERATURE REVIEW

As the microfoundations of the national macro and industrial economy, the position of enterprises in the national economic system is very important. Due to the diversity and complexity of enterprise growth, scholars have conducted a great deal of research on the nature, path and key factors of enterprise growth, greatly enriching the research results of enterprise growth and laying a solid foundation for revealing the inner laws of enterprise growth and exploring the key factors of enterprise growth. Among them, the one that has the greatest influence on enterprise growth research is the resource-based theory and capability-based theory. (Adomako, 2020; Gerber et al., 2020)

Corporate culture theory, resource-based theory and capability-based theory emphasize that enterprise is a collection of resources and capabilities, and enterprise growth is essentially the growth of resources and capabilities that an enterprise possesses, so the study of key factors of enterprise growth needs to explore the resources and capabilities of the enterprise. Based on the resource-based theory and capacity-based theory of enterprise growth, this part will focus on showing how resource-based theory and capacity-based theory are applied to research on the growth of innovative enterprises and its key factors. This section is structured as follows: firstly, research results on innovative enterprises and the meaning of innovative enterprise growth are sorted out; secondly, research results on the growth of innovative enterprises based on the capability-based theory are sorted out; thirdly, research results on innovation strategy are introduced, and research results on innovation strategy and the growth of innovative enterprises from the perspectives of resource-based theory and capability-based theory are connected.

#### **Growth of innovative enterprises**

This study believes that the growth of innovative enterprises is the improvement of economic performance and innovation performance. The growth of innovative enterprises has two dimensions. The first is the sustainable growth of the economic performance of innovative enterprises, which is consistent with the definition of enterprise growth in the enterprise growth theory; the second is the improvement of innovative enterprises' innovation performance, which is in line with the essential feature of innovative enterprises, that is, achieving sustainable innovation. (Abbas et al, 2020; Moallemi et al., 2020; Shahidul, 2020)

## **Previous Research**

# (1) Innovative enterprises

The concept of innovative enterprises has not emerged at home and abroad, and scholars at home and abroad mainly study and summarize the characteristics of successful innovative enterprises.

Table 0-1 Core characteristics of innovative enterprises

Research scholar	Core feature
Joseph Alois Schumpet (1912)	The development of new products; the introduction of new technologies, i.e. new methods of production; the opening up of new markets; the acquisition of new sources of supply of raw materials or semi-finished products; the realization of a new organization of the enterprise.
Freeman (1982)	Strong development capabilities; engaged in basic or similar research; use of patent protection; the enterprise is large enough to be financed in the long term; development time is shorter than competitors; willing to take high risks; customers are an important part of the enterprise's innovation system; continuous development of new markets; entrepreneurial spirit to effectively coordinate production and marketing; maintain close ties with universities and research institutions.
Peter F. Drucker (1973)	The primary feature is the internalization of innovation as a corporate habit and the formation of a system.
Pete Waterman (1982)	Entrepreneurs have a sense of adventure; customers are important players in innovation; innovation is closely linked to what they know; they have autonomy and an entrepreneurial spirit; they value the role of people in developing the productivity potential of the enterprise; innovation delivery is value-driven; employees are active in innovation; an organizational structure that combines centralization and decentralization.
Lazonick (2002)	Building a continuous competitive consciousness and continuously increasing the quantity and quality of the enterprise's resources; a flexible and adaptable organizational structure with collective learning

	capabilities and learning mechanisms; the benefits of successful innovation and the financing of banks and institutions
Adair (2009)	Distinctive features of the organizational structure: non-bureaucratic or non-hierarchical, including flat instead of pyramid, democratic decision-making instead of "monarchy", informal instead of formal, emphasis on egalitarian rather than vertical interaction, and taking assessable risks.
Zhang Liang (2000)	Commercializing inventions with potential market value, providing new products and services, forming new markets, building new industries, and achieving innovation-driven growth.
Xia Dong et al. (2005)	Continuous innovation, in which the company constantly brings new production or continuous improvement of process equipment to the market.
Liu Li (2006)	An innovative enterprise is an organization with the dynamic ability to continuously "discover and create" under the background of interaction with the external environment of technology, market, policy and culture, constantly breaking through existing practices, discovering innovation opportunities, integrating internal and external innovation resources to achieve continuous innovation, and taking innovation as the core.
Tian Bo (2008)	The fundamental feature that distinguishes an innovative enterprise from other enterprises is the possession of innovative resources and innovative capabilities.
He Jianhong et al. (2013)	Have a continuous innovation mechanism, can systematically transform resource elements into innovation performance, put innovation as the core content of daily management, and obtain continuous and stable innovation capacity and competitive advantage.

Guo Yuming (2013)	Take strategic innovation as the leading role, have lasting innovation motive and innovation ability, take technological innovation as the core, take system innovation, organization innovation, market innovation and cultural innovation as the guarantee, and realize driving his own development, leading industry progress and promoting socio-economic growth through innovation.
Zhang Zhengang et al. (2014)	With independent intellectual property rights of the core technology; with independent international and domestic brands; with a sound mechanism of continuous innovation; innovation culture, entrepreneurial spirit; high-quality personnel.
Li Dong (2014)	Focus on innovation resources investment, close to the market demand for innovation, managers and employees have a strong sense of innovation, innovation management system is complete, focus on improving innovation capacity and strengthen the protection of intellectual property rights.
Yin Qun (2014)	Independent innovation leadership, innovation teams, and business strategy to propose environmental strategies that will lead to world-class innovative companies.

Source: Gathered from the literature

#### (2) Growth of innovative enterprises

Penrose (1959) viewed the firm as a collection of resources, and the valuable, scarce, and non-substitutable resources and capabilities that the firm possesses are the source of growth. Enterprise growth is the process of growing endogenous resources and capabilities, and corporate size is the outward state and manifestation of Enterprise growth. Enterprise growth "includes both the quantitative improvement of enterprise scale and profit as well as the qualitative improvement of enterprise resources and capabilities." Since Penrose put forward the theory of enterprise growth, many schools of thought, such as resource-based view and capacity-based view, have studied enterprise growth from their own perspectives, but they all agree that enterprise growth is the endogenous growth of resources and capabilities. Since Schumpeter's theory of innovation, scholars studying innovation have also become strongly interested in business growth.

Enterprise growth is the ultimate goal of production and operation of enterprises, is the driving

factor of industry-wide and overall economic development, is the core issue of management of continuous attention in academia and industry. Its emergence and development dynamics have been widely concerned by domestic and foreign scholars, business practitioners and policy makers (Leitch et al, 2010; Shepherd and Wiklund, (2009). Domestic and foreign scholars generally believe that enterprise growth is a continuous phenomenon and process of dynamic development and change, and a driving factor for the development of the whole industry and the whole economy. They describe enterprise growth as a multi-dimensional phenomenon that is complex and difficult to predict and evaluate. (Davidsson et al., 2006; Delmar et al., 2003; Shen Tao, 2017). Therefore, it is imperative to summarize the research literature related to firm growth and explore the boundaries of enterprise growth concepts (Tunberg, 2014). Although there are differences in the terms used by different scholars for enterprise growth, these terms are basically consistent with the long-term goals and actual connotations of "enterprise growth".

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Research review: This study adopts the definitions of the meaning and characteristics of innovative enterprises from three ministries, including the Ministry of Science and Technology of China. There are two aspects of innovative enterprise growth: the first is the sustainable growth of the economic performance of innovative enterprises, which is consistent with the definition of enterprise growth in the enterprise growth theory; the second is the improvement of innovative enterprises' innovation performance, which is in line with the essential feature of innovative enterprises, that is, achieving sustainable innovation.

#### **METHODOLOGY**

#### **Research Design**

#### **Research Ideas**

This paper follows the logical approach and system structure of problem posing, problem analysis and problem solving. The research is conducted according to the research line of "literature reading  $\rightarrow$  management theory  $\rightarrow$  research framework  $\rightarrow$  research hypothesis  $\rightarrow$  questionnaire formation and investigation  $\rightarrow$  statistical analysis  $\rightarrow$  conclusion formation".

#### **Research methods**

Literature research method, questionnaire method and data analysis were used in this study. The details are as follows:

#### (1) Literature Research Method

Using domestic and foreign academic paper databases and libraries to conduct literature search, retrieve, sort out and analyze important relevant literature and management theories on innovative enterprises, innovative enterprise growth, enterprise core culture, innovation

resources, innovation capabilities, innovation strategies, etc. Determine the research framework and hypothesis of the relationship between core factors of innovative enterprises and enterprise growth, and test and validate the research questions and objectives.

#### (2) Questionnaire method

The questionnaire method is one of the more widely used methods in social surveys at home and abroad. The questionnaire method is a method in which the researcher uses this type of controlled measurement to measure the problem under study in order to gather reliable information. In the questionnaire method, most of the questionnaires are sent by mail, individual distribution or collective distribution.

# (3) Data Analysis Method

In order to validate the accuracy of the research hypothesis, two main methods are used in this paper to test the relevant hypothesis: correlation analysis and regression analysis. The basic function of correlation analysis is to be able to make initial judgments about the relationship between variables through their data relationships and to determine whether there is a correlation between the variables. Regression analysis provides greater insight into the interactions between variables and enables statistical analysis of the causal relationship between multiple variables (independent variables) and a particular variable (dependent variable). Regression analysis compares the magnitude of the influence of different variables on a factor by comparing the regression coefficients of multiple factors on a given factor.

#### **Population / Sampling / Unit of Analysis**

The sample objects of this study are innovative pilot enterprises at national, provincial and municipal levels in Zhejiang Province.

The questionnaire was distributed to managers and executives of innovative enterprises in Zhejiang Province. 430 questionnaires were distributed, of which 304 were valid, with an effective recovery rate of 70.7%.

The researcher distributed the questionnaire mainly through professional WeChat groups, including 141 people from "Zhejiang Entrepreneurs Association Group", 231 people from "Zhejiang Professional Managers Group", and 58 people from "Zhejiang Master's and Doctoral Companionship Group".

# **Findings & Discussion**

#### **Profile of Respondents**

#### Geographical area of respondents.

Among the 324 questionnaires in this survey, 5 invalid questionnaires without addresses and 15 questionnaires outside Zhejiang province were excluded, and 304 of the questionnaires met the

analysis requirements. See table below for details:

Table 0-1 Geographical area of respondents

Provinces	Subtotal
Shanghai	6
Zhejiang	304
Shandong	3
Beijing, capital of People's Republic of China	3
(Empty)	5
Hebei	3
Aggregate	324

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Nature of Respondent's Business. The nature of the companies involved in the survey is as follows.

Table 0-2 Nature of the business in the questionnaire

Options	Subtotal	proportions
State enterprise	18	5.56%
Private enterprises (non-	228	70.37%
listed)		
Foreign-invested enterprises	30	
		9.26%
Private enterprises (listed)	48	
		14.81%
Number of valid entries for	324	100%
this question		

The questionnaire was distributed according to the nature of the enterprise as follows. 18 state-owned enterprises, accounting for 5.56%, 228 private non-listed enterprises, accounting for 70.37%, 30 foreign-owned enterprises, accounting for 9.26%, 48 private listed enterprises, accounting for 14.81%, from the distribution of the survey questionnaire by the nature of the enterprise, the survey questionnaire is representative.

Whether the respondent's company is recognized as an innovative company

Table 0-3 Whether the respondent's company is recognized as an innovative company

Options	Subtotal	proportions
Yes	306	94.44%
No	18	5.56%
Number of valid entries for	324	100%
this question		

There were 306 questionnaires from innovative enterprises, accounting for 94.44% of the total, and 18 questionnaires from non-innovative enterprises, accounting for 5.56% of the total. From the distribution of innovative enterprises, this questionnaire is representative.

Total number of employees in the respondent's enterprise.

Table 0-4 Total number of employees in the respondent's enterprise

Options	Subtotal	proportions
<100 people	12	3.7%
100-300 people	93	28.7%
300-500 people	66	20.37%
More than 500 people	153	47.22%
Number of valid entries for	324	100%
this question		

According to the total number of employees, the questionnaire distribution is as follows: There were 12 questionnaires from enterprises with fewer than 100 employees, accounting for 3.7%; 93 questionnaires from enterprises with 100-300 employees, accounting for 28.7%; 66 questionnaires from enterprises with 300-500 employees, accounting for 20.37%; 153 questionnaires from enterprises with more than 500 employees, accounting for 47.22%. From the perspective of the distribution of the total number of employees, this questionnaire is representative.

Registered capital of Respondents' enterprise:

Table 0-5 Registered capital of Respondents' enterprise

Options	Subtotal	proportions
Less than 50 million	15	4.63%
5 ten million to 100 million	102	31.48%

100 million-200 million	93	28.7%
200-300 million	42	12.96%
300-500 million	36	11.11%
Over 500 million	36	11.11%
Number of valid entries for	324	
this question		

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According to the enterprise's registered capital, the questionnaire distribution is as follows: There were 15 questionnaires from enterprises below 50 million, accounting for 4.63%, 102 questionnaires from 50 million to 100 million, accounting for 31.48%, 93 questionnaires from 100 million to 200 million, accounting for 28.7%, 42 questionnaires from 200 million to 300 million, accounting for 12.96%, 36 questionnaires from 300 million to 500 million, accounting for 11.11%, 36 questionnaires from more than 500 million, accounting for 11.11%. From the perspective of the distribution of the enterprise's registered capital, this questionnaire is representative.

Respondents' education background.

Table 0-6 Respondents' education background

Options	Subtotal	proportions
PhD	15	4.63%
Master	93	28.7%
Undergraduate	159	49.07%
College and below	57	17.59%
Number of valid entries for	324	100%
this question		

According to the education level of the respondents, the questionnaire distribution is as follows: 15 (4.63%) for doctoral degree, 93 (28.7%) for master's degree, 159 (49.07%) for bachelor's degree, and 57 (17.59%) for college and below. From the perspective of the distribution of the respondents' education background, this questionnaire is representative.

Gender of Respondents.

**Table 0-7 Gender of the respondents** 

Options	Subtotal	proportions
Male	189	58.33%

Female	135	41.67%
Number of valid entries for	324	100%
this question		

According to the gender of the respondents, the questionnaire distribution is as follows: With 189 males (58.33%) and 135 females (41.67%), from the perspective of the distribution of gender of the respondents, this questionnaire is representative.

Position level of the respondents.

**Table 0-8 Position level of the respondents** 

Options	Subtotal	proportions		
Chairman of the board	12	3.7%		
General manager	84	25.93%		
Deputy general manager	120	37.04%		
Director	60	18.52%		
Manager	45	13.89%		
Other	3	0.93%		
Number of valid entries for	324			
this question				

According to the the position level of the respondents, the questionnaire distribution is as follows: There were 12 questionnaires from chairman of the board, accounting for 3.7%; 84 questionnaires from General Manager, accounting for 25.93%; 120 questionnaires from Deputy General Manager, accounting for 37.04%; 60 questionnaires from Director, accounting for 18.52%; 45 questionnaires from Manager, accounting for 13.89%; 3 questionnaires from Other, accounting for 0.93%. From the perspective of the distribution of position level of the respondents, this questionnaire is representative.

Industry of the respondent

**Table 0-9 Industry of the respondents** 

Options	Subtotal	proportions
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Advanced Manufacturing and Automation	48	14.81%
Biology and new medicine	42	12.96%
Electronic information	62	19.44%
New Energy and Energy Conservation	45	13.89%
Resources and the environment	69	21.3%
New materials and others	57	17.59%
Number of valid entries for this question	324	100%

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According to industry of the respondent, the questionnaire distribution is as follows: There were 12 questionnaires from Advanced manufacturing and automation, accounting for 14.81%; 12 questionnaires from biology and new medicine 42, accounting for 12.96%; 62 questionnaires from electronic information, accounting for 19.44%; 45 questionnaires from new energy and energy conservation, accounting for 13.89%; 69 questionnaires from resources and environment, accounting for 21.3%; 57 questionnaires from new materials and others 57, accounting for 17.59%. From the perspective of the distribution of industry of the respondents, this questionnaire is representative.

Total sales of respondents' companies

Table 0-10 Total sales of respondents' companies (RMB)

Options	Subtotal	proportions	
Less than 0.2 billion	6	1.85%	
0.2 - 0.5 billion	6	1.85%	
0.5 - 0.1 billion	24	7.41%	
100 million-200 million	72	22.22%	
200 million-500 million	147	45.37%	
More than \$500 million	69	21.3%	
Number of valid entries for this question	324	100%	

According to the total sales of respondents' companies, the questionnaire distribution is as follows: There were 6 questionnaires from enterprises with less than 20 million yuan, accounting for 1.85%; 6 questionnaires from enterprises with 20 million to 50 million, accounting for 1.85%; 24 questionnaires from enterprises with 50 million to 100 million yuan, accounting for 7.41%; 72 questionnaires from enterprises with 100 million-200 million yuan, accounting for 22.22%; 147 questionnaires from enterprises with 200 million to 500 million, accounting for 45.37%; 69 questionnaires from enterprises with more than 500 million yuan, accounting for 21.3%. From the perspective of the distribution of total sales of respondents' companies, this questionnaire is representative.

# Research Objective 1 (R.O.) 1)

# **Analysis**

Correlation analysis was conducted on the questionnaire data of core culture and corporate performance:

Correlation analysis is used to examine the relationship between quantitative data, whether there is a relationship, how close the relationship is, etc..

First: Specifically analyze the relationship between each Y and each X respectively to see if there is a significant relationship between Y and X. Second: Then analyze whether the correlation is positive or negative; also show how close the relationship is by the size of the correlation coefficient; third. Summarize and analysis.

Table 0-11 Pearson's correlation coefficient between core culture and firm performance - Standard Format

Pearson's correlation coefficient		Pearson's correlation	
between core culture and firm		coefficient between core	
performance - Standard Format		culture and firm	
		performance - Standard	
		Format	
	Enterprise		Enterprise
	Performance		Performance
The business has a better mission	0.398**	11. High average growth	0.398**
		rate in the number of	
		persons in charge of	
		corporate culture.	

The business has a better vision	0.336**	12. Vision, mission and values are described in the corporate culture manual or specification.	0.126**
The company has better values	0.323**	13. Regularly organize employees to learn and comprehend the enterprise culture.	0.092**
* p<0.05 ** p<0.01		14. Developed a system of rationalized suggestions from employees on corporate culture.	0.336**
		15. High average growth rate in corporate culture construction costs.	0.323**
		* p<0.05 ** p<0.01	

From the above table, we can see that the correlation analysis is used to study the correlation between corporate performance and the three items of "the company has a better vision", "the company has a better mission", and "the company has better values", and the Pearson correlation coefficient is used to show the strength of the correlation. After specific analysis, we can know: The correlation coefficient value between corporate performance and "the company has a better vision" is 0.398 and shows a significance at the 0.01 level, thus indicating a significant positive correlation between corporate performance and "the company has a better vision". The value of the correlation coefficient between corporate performance and "the company has a better mission" is 0.336 and shows a significance of 0.01 level, thus indicating a significant positive relationship between corporate performance and "the company has a better mission". The value of the correlation coefficient between corporate performance and "the company has better values" is 0.323 and shows significance at the 0.01 level, thus indicating a significant positive correlation between corporate performance and high mean growth rate of core culture building expenses.

Further regression analysis of core culture and firm performance shows that:

It can be concluded that regression analysis is used to investigate the relationship between X (quantitative or qualitative) and Y (quantitative), whether there is an influence relationship, the direction of the influence and how much influence is present.

First, the model fitting is analyzed, i.e., the model fitting is analyzed by the R squared values, and the VIF value can be analyzed to determine whether there is the problem of multicollinearity [the problem of multicollinearity can be solved using ridge regression or stepwise regression]. Second: Write out the model formulas (optional).

Third: Analyze the significance of X. If it shows significance (with p-value less than 0.05 or 0.01), it means that X has an influence relationship on Y. Then specifically analyze the direction of the influence relationship;

Fourth. Combined with the regression coefficient B value, compare and analyze the influence of X on Y(optional)

Fifth: Summarize and analysis.

Table 0-12 Results of Linear Regression Analysis of Core Culture and Firm Performance (n=304)

Results of Linear Regression Analysis of Core Culture and Firm Performance ( <i>n</i> =304)									
	Unstandardized coefficients		Standardize <i>t</i> d coefficients	t	p	VIF	R 2	Adjuste d R <sup>2</sup>	F
	В	Standar d error	Beta						
Constan t	2.66 7	0.515	-	5.18 1	0.000*	-	0.29 7	0.276	F (3,104)
The	0.24	0.055	0.362	4.36	0.000*	1.01			=
business	1			7	*	6			14.627,
has a									p=0.000
better mission									
The	0.20	0.067	0.262	3.04	0.003*	1.09			
business	3			4	*	4			
has a									
better									
vision									
The	0.09	0.041	0.201	2.31	0.022*	1.10			
compan	5			9		9			
y has better									
values	4 1	.1	:						
Dependent variable: enterprise performance									

D-W Value: 1.248

\* p<0.05 \*\* p<0.01

From the above table, we can see that "the company has a better vision", "the company has a better mission", and "the company has better values", are taken as the independent variables, and corporate performance is taken as the dependent variable in the linear regression analysis. From the above table, it can be seen that the R-squared value of model is 0.297, meaning that "the company has a better vision", "the company has a better mission", and "the company has better values" can explain 29.7% of changes in corporate performance. When F test is carried out on the model, it is found that the model passes the F test (F=14.627, P =0.000<0.05), which indicates that at least one of the "the company has a better vision", "the company has a better mission", and "the company has better values" have an impact on the enterprise performance, and the model formula is as follows:

Enterprise Performance = 2.667 + 0.241\* "the company has a better vision" + 0.203\* "the company has a better mission" + 0.095\* "the company has better values". The value of the regression coefficient of "the company has a better vision" is 0.241 (t=4.367, p=0.000<0.01), which means that "the company has a better vision" will have a significant positive impact the performance of the firm. The regression coefficient value of "the company has a better mission" is 0.203 (t=3.044, p=0.003<0.01), which means that "the company has a better mission" will have a significant positive impact on the performance of the The regression coefficient value of "the company has better values" is 0.095 (t=2.319, p=0.022<0.05), which means that "the company has better values" will have a significant performance positive impact on the of The analysis concludes that: "The company has a better vision", "the company has a better mission", and "the company has better values" all have a significant positive impact on the performance of the company.

#### **Conclusion**

After the previous empirical research and literature study and discussion of the research objectives we came to the following conclusions.

Firstly, through literature research and empirical studies on corporate performance, it is found that there is a significant positive correlation between the three dimensions of core culture: mission, vision and values and corporate performance. Therefore, a good core culture is conducive to improving the performance of innovative enterprises in Zhejiang Province.

Second, through literature research and empirical research on enterprise performance,

It is found that there is a significant positive correlation between the four dimensions of innovation resources: organizational resources, R&D resources, market resources, government support and enterprise performance. Therefore, enterprises with good innovation resources contribute to the performance improvement of innovative enterprises in Zhejiang Province.

Thirdly, through literature research and empirical studies with enterprise performance, it is found

that there is a significant positive correlation between the five dimensions of innovation capability: innovation thinking capability, innovation strategy capability, innovation learning capability, innovation management capability, and innovation realization capability and enterprise performance. Therefore, higher innovation capacity of firms helps improve the performance of innovative firms in Zhejiang Province.

Fourthly, through the analysis of data and literature research on innovation strategy and enterprise performance, it is found that there is a positive correlation between innovation strategy and enterprise performance, and innovation strategy has a mediation effect on core culture and enterprise performance, i.e. core culture will first influence innovation strategy, and then influence enterprise performance through innovation strategy, which fully illustrates the importance of innovation strategy.

The analysis of the mediation model between innovation strategy on innovation resources and firm performance leads to the conclusion that innovation strategy has a mediation effect on the innovation resources and firm performance, i.e., innovation resources first influence innovation strategy and then go on to influence firm performance through innovation strategy, again indicating the importance of innovation strategy. (Taghizadeh et al., 2020; Djumanazarovna, 2020)

The 2020 Innovative Nation Development Forum and the White Paper (Report) on Enterprise Innovation Development in 2020 stated that innovation is the soul of a nation's progress, the inexhaustible power source of a country's prosperity and the deepest national endowment of the Chinese nation. In the fierce international competition, only the innovator advances, only the innovator is strong, only the innovator wins. General Secretary Xi Jinping said. "To insist on innovation-driven development is to place innovation at the center of the national development strategy and to make innovation common practice throughout the nation."

The Fifth Plenary Session of the 18th CPC Central Committee made clear the five development concepts of "innovative, coordinated, green, open, and shared development ". This will be the thinking, direction and focus of China's development during the 13th Five-Year Plan period and beyond. Among them, the word "innovative" comes first. Since the 18th National Congress, the word "innovative" has appeared more than a thousand times in the public speeches and reports of Party and State leaders, indicating the importance it has been given.

In the face of a complex reform environment and arduous development tasks, China today needs to be driven by innovation more than ever before. Whether it is seeking progress in a stable manner to promote transformational development or safeguarding the environment to build a "beautiful China", we need to bear in mind that "to meet the challenges, the most fundamental is reform and innovation", and we need to support innovation and creation to the maximum extent, so that the creativity of the whole society can be fully released and innovative talents from all walks of life can emerge.

Innovation is the main theme of development in the new era, and it is the number one driving force leading development and the strategic support for building a modern economic system. The development of economic globalization has led to an increase in the competitive pressure faced

by enterprises, and the competition between economic entities has gradually evolved into a competition between knowledge, technology and innovation, with innovation becoming the dominant way for enterprises, industries and countries to build sustainable advantages. Although China has become the second largest economy in the world and has entered the ranks of a major economic power, there is still a big gap between China and developed countries in terms of scientific and technological innovation level and innovation capacity. China's independent innovation capacity still needs to be improved, and China still faces severe international and domestic situations. It has become a general consensus among the government, industry, academia and enterprises on how to improve the capability of independent innovation and realize the transformation of innovation-driven economic development mode. The report of the 19th National Congress of the Communist Party of China (CPC) emphasizes that it is of great and farreaching significance to accelerate the building of an innovative country as a strategic initiative in the overall context of modernization, firmly implement the innovation-driven development strategy, strengthen the position and role of innovation as the primary driving force, and highlight the importance of scientific and technological innovation to lead comprehensive innovation.

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There are few studies on how to evaluate the growth of innovative enterprises (enterprise performance); what are the core factors of innovative enterprise growth and how to influence enterprise performance; how to build a logical thinking and research framework between core culture, innovation resources, innovation capability, innovation strategy and innovative enterprise performance, and there is a lack of theoretical foundation and empirical quantitative research. Based on this status quo, this paper conducts a multidimensional study and carries out reliability and validity verification.

First, the core culture of innovative companies and corporate growth (performance)

In this paper, the core culture of innovative enterprises is defined as the three dimensions of mission, vision and values, and this study shows that "the company has a better vision", "the company has a better mission", and "the company has better values", are taken as the independent variables, and corporate performance is taken as the dependent variable in the linear regression analysis. From the above table, it can be seen that the R-squared value of model is 0.297, meaning that "the company has a better vision", "the company has a better mission", and "the company has better values" can explain 29.7% of changes in corporate performance. When F test is carried out on the model, it is found that the model passes the F test (F=14.627, P =0.000<0.05), which indicates that at least one of the "the company has a better vision", "the company has a better mission", and "the company has better values" have an impact on the enterprise performance The value of the regression coefficient of "the company has a better vision" is 0.241 (t=4.367, p=0.000<0.01), which means that "the company has a better vision" will have a significant positive impact on the performance of the firm. The regression coefficient value of "the company has a better mission" is 0.203 (t=3.044, p=0.003<0.01), which means that "the company has a better mission" will have a significant positive impact on the performance of the firm. The regression coefficient value of "the company has better values" is

0.095 (t=2.319, p=0.022<0.05), which means that "the company has better values" will have a significant positive impact on the performance of the firm. (Rubio-Mozos et al., 2020; Watanabe et al, 2020; Ciulla, 2020)

### References

- Abbas, J., Zhang, Q., Hussain, I., Akram, S., Afaq, A., & Shad, M. A. (2020). Sustainable Innovation in Small Medium Enterprises: The Impact of Knowledge Management on Organizational Innovation through a Mediation Analysis by Using SEM Approach. *Sustainability*, 12(6), 2407.
- Adomako, S. (2020). Environmental collaboration, sustainable innovation, and small and medium-sized enterprise growth in sub-Saharan Africa: Evidence from Ghana. Sustainable Development.
- Bai Guiyu (2016). Research on the relationship between knowledge-based employee motivation, innovation legitimacy and innovation performance. Shandong University.
- Chen Chao,Li Hong (2017). Research on the Innovation Strategy Based on Corporate Growth Theory. Journal of Anhui West College.
- Chen Jiao et al. (2015). The impact of complementary resources and innovation resource synergy on firm growth the moderating role of environmental dynamics. Systems Engineering.
- Chen Yan et al. (2015). Multidimensional Government Involvement, Dynamic Enterprise Dynamics Capabilities and Overseas R&D An Empirical Study Based on Chinese Innovative Enterprises. Management Science.
- Chen Yan et al. (2015). Multidimensional Government Involvement, Enterprise Dynamic Capabilities and Overseas R&D-An Empirical Study Based on Chinese Innovative Enterprises. Science Management.
- Chen, L., Hu, W. F., Long, C., & Wang, D. (2020). Exogenous plant growth regulator alleviate the adverse effects of U and Cd stress in sunflower (Helianthus annuus L.) and improve the efficacy of U and Cd remediation. *Chemosphere*, 262, 127809.
- Chen, L., Long, C., Wang, D., & Yang, J. (2020). Phytoremediation of cadmium (Cd) and uranium (U) contaminated soils by Brassica juncea L. enhanced with exogenous application of plant growth regulators. *Chemosphere*, 242, 125112.
- Cheng Huifang (2015). Innovative enterprises: from imitation innovation to independent innovation-an analysis of survey on the development of innovative enterprises in Zhejiang Province. Zhejiang Economy.

- Ciulla, J. B. (2020). The importance of leadership in shaping business values. In *The Search for Ethics in Leadership, Business, and Beyond* (pp. 153-163). Springer, Cham.
- Dang, Xinghua, Zhang, Chen. (2015). Research on FANP-based Innovative Enterprise Evaluation Model. Science and Technology Management.
- Ding Yu et al. (2015). The Influence of Innovative Corporate Culture on Corporate Growth: The Mediating Role of Strategic Capabilities A Case Study of Science and Technology-based SMEs in Xinjiang. Technology and Economy.
- Djumanazarovna, K. G. (2020). The role of the state in the formulation of innovation strategy in industrial enterprises. *Academy*, (4 (55)).
- Dong Baobao, Yu Dongming, Wang Kan (2015). The Impact of Resource Heterogeneity and Dynamic Capabilities on the Competitive Advantage of New Innovative Firms. Technoeconomics & Management Research
- Feng Yanbo,Liu Xiaoyu (2015). The Analysis of the Input Structure of Corporate Innovation Capacity Based on Knowledge Governance Perspective. Resource Development and Market.
- Feng, Chang-Gen, Zhang, Wei-Jin (2019). The development of innovative enterprises over time. Shaoxing Daily.
- Gerber, A., le Roux, P., & van der Merwe, A. (2020). Enterprise Architecture as Explanatory Information Systems Theory for Understanding Small-and Medium-Sized Enterprise Growth. *Sustainability*, 12(20), 8517.
- Guo Yuming (2015). Research on Innovation Efficiency and Development Model of Innovative Enterprises. Hebei University of Technology.
- He Jianhong, et al. (2015). The formation of innovative firms: A study based on the influence of network capabilities and strategic innovation orientation. China Soft Science.
- Hu Bian (2019). Study on the Influence of CSIC's Corporate Culture on Technological Innovation Capability. Shihezi University.
- Huang Xianhai et al. (2015). Research on product innovation, process innovation and the export propensity of Chinese enterprises. Economist.
- Li Wenqiang (2019). Research on the effect of internal innovation resource collaboration on corporate innovation performance. Liaoning University.
- Li, Huaizu (2019). Management Research Methodology. Xi'an: Xi'an Jiaotong University Press.
- Liang Wen, Ling Shan (2015). A Study on the Reconstruction of Corporate Competitive Advantage Based on Corporate Culture and Dynamic Capabilities. Business Research.

- Liu Quling, Zhang Chunling (2018). Research on the growth strategy of innovative SMEs in regional innovation system. China Management Informatization.
- Moallemi, E. A., Malekpour, S., Hadjikakou, M., Raven, R., Szetey, K., Ningrum, D., ... & Bryan, B. A. (2020). Achieving the Sustainable Development Goals requires transdisciplinary innovation at the local scale. *One Earth*, *3*(3), 300-313.
- Qian Min,Sun Man (2019). The relationship between equity structure and firm performance in New Third Board firms. Friends of Accounting.
- Rong Pengfei (2019). Growth of Innovative Firms in the Context of Global Cities. Social Science Journal.
- Rubio-Mozos, E., García-Muiña, F. E., & Fuentes-Moraleda, L. (2020). Application of Ecosophical Perspective to Advance to the SDGs: Theoretical Approach on Values for Sustainability in a 4S Hotel Company. *Sustainability*, *12*(18), 7713.
- Shahidul, M. I. (2020). Engineering Education For Achieving Sustainable Development Goals By 2030: Revealing The Paths For Challenging Climate Change And Covid 19. *sustainable development*, 5(2), 6.
- Taghizadeh, S. K., Karini, A., Nadarajah, G., & Nikbin, D. (2020). Knowledge management capability, environmental dynamism and innovation strategy in Malaysian firms. *Management Decision*.
- Wang Bihao (2016). Research on Technological Innovation Efficiency of Enterprises in Innovation-Driven Development. Nanjing University.
- Wang Jianjun, Zan Dongping(2015). The Relationship between Dynamic Capabilities, Crisis Management and Enterprise Competitive Advantage. Research Management.
- Wang, Shengli, Wang Di (2018). The Evolution of Corporate Growth Theory and Its Practical Implications. Business Economics.
- Watanabe, K., Kawakami, N., & Nishi, D. (2020). Association between personal values in adolescence and mental health and well-being in adulthood: a cross-cultural study of working populations in Japan and the United States. *Annals of General Psychiatry*, 19(1), 7.
- Wei Bolushi (2019). Creating an Innovative Enterprise. Learning Times.
- Wu, Xiaobo et al. (2017). China Corporate Health Index Report. Hangzhou: Zhejiang University Press.
- Xiong Shengxu,Li Ting (2019). Effect of Organizational Flexibility on the Innovation Performance of Firms. Journal of Central South University of Economics and Law.

- Xue Jie, Zhang Zhendang (2015). The relationship between dynamic learning capabilities and innovation performance of firms in a turbulent technological and market environment. Science and Technology Progress and Countermeasures.
- Zhang Kun (2019). Study on the role of learning orientation on the growth of new start-ups mechanism. Jilin University.
- Zhang Yongcheng et al. (2015). The 11 Years of Research on Foreign Open Innovation Theory: Review, Review and Prospect. Science and Technology Management.
- Zhang Zhendang et al. (2015). Research on the relationship between open innovation, absorptive capacity and innovation performance. Research Management.
- Zhang, Fang-Hua, Tao, Jing-Yuan (2016). Research on the relationship between intra-firm factor collaboration and innovation performance. Research Management.
- Zhang, Ling (2016). The relationship between open innovation, technology commercialization capability and firm growth. South China University of Technology.
- Zhao L.L., Wei Jiang (2015). The Matching of Service Innovation Strategy and Technological Capabilities in Manufacturing Enterprises: A Case Study of Huawei. Research Management.
- Zhao Shuliang (2016). Research on open innovation and resource sharing model of district cities in the Internet context. University of Science and Technology of China.
- Zhou, Q., Gao, B., Li, W. F., Mao, J., Yang, S. J., Li, W., ... & Chen, B. H. (2020). Effects of exogenous growth regulators and bud picking on grafting of grapevine hard branches. *Scientia Horticulturae*, 264, 109186.