

Article

Analysis of the importance of business model and business plan in the process of entrepreneurship: Taking college students entrepreneurship as an example

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Abstract: This article explores in-depth entrepreneurship, focusing on business models and business plans. Taking the difficulties and challenges faced by college students as an example, it analyzes the importance of business model innovation to entrepreneurial enterprises and its key role in market competition. The article first summarizes the concept of entrepreneurship and the problems it faces, and then introduces the business model and its application in entrepreneurship, the definition and components of the business plan, and how to make an effective business plan according to market demand, technology trends, and the competitive environment. This paper points out that a successful business model needs to be closely combined with market positioning, product strategy, marketing means, profit model, and other elements, and the formulation of a business plan requires rigorous steps. The study has concluded that the business model is the core of the business plan, and the plan is the specific implementation of the model. The two need to adjust to each other and jointly determine the success of the enterprise. The future development trend of the business model and business plan is the trend of digitalization and intelligence, personalization and customization, flexibility, and adaptability. This paper puts forward suggestions for entrepreneurs represented by college students: an in-depth understanding of market and customer needs, the need to maintain innovative thinking, the feasibility of a socialist plan, etc., thus improving the success rate of entrepreneurship. This paper enriches the relevant theories of entrepreneurship, lays the foundation for in-depth research, and has certain theoretical significance.

Keywords: entrepreneurship; college students; business model; business plan; innovation management

1. Introduction

In today's highly competitive and rapidly developing business environment, entrepreneurship has become an important force to promote economic growth, create job opportunities, and drive social progress. Entrepreneurship is an important driving force to promote regional economic growth and a key carrier for deepening supply-side structural reform and implementing an innovation-driven development strategy. Entrepreneurship is based on innovation. Innovation is a powerful driving force for economic development and a core driving force for high-quality development. The structural contradictions of the Chinese employment market are relatively prominent, which specifically show that in an environment of rapid upgrading and transformation of industrial structure, the talent supply does not match the talent demand of enterprises [1]. The prominent structural contradictions in the employment market

objectively make more people choose to start their own businesses, thus promoting the development of entrepreneurship.

The 36 Kr Research Institute, a Chinese market venture capital industry research organization, released the “2021 China Core Entrepreneurs Research Report” in 2021 [2]. The report shows that 40% of entrepreneurs are young people under the age of 30, and young people are becoming the main force of entrepreneurship, showing an increasing trend year by year. With the release of a series of policies, such as Guiding Opinions on Further Supporting the Innovation and Entrepreneurship of College Students, Notice on Tax Policies Related to Supporting and Promoting Employment, and Implementation Opinions on Deepening the Reform of Innovation and Entrepreneurship Education in Institutions of Higher Learning [3], the practice of “entrepreneurship and innovation” in China has entered a new stage of development [4]. In 2017, the CPC Central Committee and the State Council issued the “Medium- and Long-term Youth Development Plan (2016–2025)” [5], which listed “youth employment and entrepreneurship” as one of the ten key development goals and put forward the policy system to promote youth employment and entrepreneurship [6]. In addition, with the support of a series of policies, all provinces and universities have launched “Internet +”, “Challenge Cup” and “College Students Innovation and Entrepreneurship Training Plan” to promote innovation and entrepreneurship activities for college students. However, although the environment for the number of entrepreneurs is improving and the number of entrepreneurs is increasing, the failure rate is still high, as is the result for college students, too. In addition, according to the “2022 College Student Employment Report”, only 1.2% of college graduates choose to start their own businesses [7]. It can be seen that the entrepreneurial situation is grim. Wang analyzed the reasons for the failure of college students’ entrepreneurship from the perspectives of culture and education, social resources, information acquisition, and subjective reasons [8]. Liu and Ma pointed out the entrepreneurial difficulties of college students from the four aspects of employment concept, entrepreneurship mechanism, policy system, and platform construction [9]. Ping pointed out the reasons for failure from the aspects of social environment, college students’ self-cognition, comprehensive quality, and so on [10]. Other scholars also analyzed the reasons for the high failure rate of entrepreneurship from the perspectives of the external environment, college students’ own quality, college entrepreneurship education, and public opinion [11–15]. These scholars also explored the path of innovation and entrepreneurship from the aspects of national policies, setting clear goals, building teams, improving courses, improving their own quality, psychological education [16], fault tolerance mechanisms, and so on. Among them, the establishment of the fault-tolerant mechanism is conducive to eliminating the ideological burden of college students’ entrepreneurship and can effectively expand the theoretical system of college students’ innovation and entrepreneurship work, which is of great significance to college students’ entrepreneurship [17]. In universities, college students can learn the writing of business models and business plans through innovation and entrepreneurship competitions. This study focuses on analyzing the role of business model and business plan in entrepreneurship and exploring the significance of a perfect business model and business plan for entrepreneurship.

Successful entrepreneurial activities are often inseparable from well-designed business models and business plans. The business model determines how the enterprise creates value, transmits value, and obtains value, and the business plan is the blueprint and action plan to realize this process. Therefore, the research on “entrepreneurship focusing on business model and business plan” is of great significance for guiding entrepreneurial practice and improving the success rate of entrepreneurship.

The following two research methods are used in this paper:

(1) Literature research method: through systematic collection and analysis of existing research literature, understand the main theories in the field of human resource performance management, search the literature related to big data and human resource performance management, and collect and sort out the literature as the basis for the research and demonstration of this paper.

(2) Inductions: analyze combined with cases, explore the common problems in specific cases, explore the universality of particularity, summarize, start from specific cases, seek commonality from individuality, summarize ideas with certain generality, and expand the research direction.

The research significance of this paper is shown as follows:

The first is the theoretical value. Enrich entrepreneurial theory: By focusing on the research of business models and business plans, we can further enrich and improve the entrepreneurial theory system and provide theoretical support and reference for subsequent academic research. Disclosure of the mechanism of success: Studying successful entrepreneurial cases and analyzing the business model and business plan behind them can help reveal the internal mechanisms and laws of entrepreneurial success and provide reference and guidance for later entrepreneurs. The logical theory of the entrepreneurial decision-making effect points out that entrepreneurship is an iterative process in which entrepreneurs constantly adjust their understanding and decision-making of entrepreneurial output. Opportunities and environment evolve together in this process and finally gradually form entrepreneurial products and services.

The second is the practical significance. Guiding entrepreneurial practice: For entrepreneurs, a reasonable business model and business plan are the keys to entrepreneurial success. Studying this field can provide specific guidance and suggestions for entrepreneurs and help them better design business models and make business plans, so as to improve the success rate of entrepreneurship. Promoting economic development: Entrepreneurship is an important force for promoting economic development. Through the study of business models and business plans, more entrepreneurial talents can be cultivated to promote more innovative projects and thus promote the sustainable and healthy development of the economy. Optimize resource allocation. Effective business models and business plans can realize optimal allocation and efficient utilization of resources. The research in this field is helpful to guide enterprises to better allocate resources, improve the efficiency of resource utilization, and achieve a win-win situation of economic and social benefits.

In short, the research focusing on the business model and business plan not only has profound theoretical value but also has important practical significance. It can not only promote the development and perfection of entrepreneurial theory but also

provide strong guidance and support for entrepreneurial practice and promote the sustainable and healthy development of the economy.

Figure 1 is the research structure diagram of this paper, showing the process idea of this paper. First of all, the relevant theories of entrepreneurship are introduced; the business model and business plan are introduced, respectively; and finally, the summary and suggestions are given.

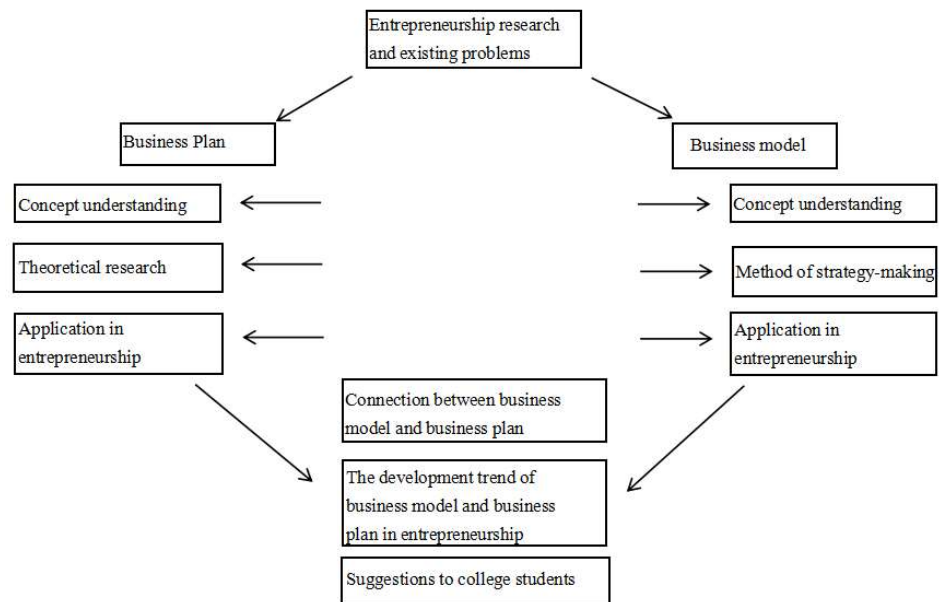


Figure 1. The research structure diagram.

2. Theoretical research on entrepreneurship

2.1. The concept of entrepreneurship

The core spirit of entrepreneurship is innovation. Innovation is a way of thinking that cannot be directly converted into productivity; entrepreneurship is a practical activity that is directly implemented into practical action. Entrepreneurship means that the products or services they provide are widely accepted by the market, which can produce economic returns and gradually generate profits so as to achieve success [18]. The concept of entrepreneurship can be understood from the following four aspects:

(1) Entrepreneurship is a complex creative process. It creates some valuable new things. This new thing must be valuable, not only to the entrepreneurs themselves but also to society. The value attribute is an important social attribute of entrepreneurship, as is the significance and value of entrepreneurial activities.

(2) Entrepreneurship must contribute the necessary time and energy and make a great effort. It takes a lot of time to complete the whole entrepreneurial process and create new and valuable things, but success is impossible without great effort, and many entrepreneurial activities are achieved early on in a very difficult environment.

(3) Entrepreneurship must bear the inevitable risks. Entrepreneurial risk can take various forms, depending on the field of entrepreneurship and the resources of the entrepreneurial team. However, the usual entrepreneurial risk is mainly human resource risk, market risk, financial risk, technical risk, external environment risk, contract risk, spiritual risk, and other aspects. Entrepreneurs should have superhuman

courage, be willing to take risks, and have the courage to bear the risk of most people's careers.

(4) The rewards that entrepreneurship will bring to entrepreneurs. As an entrepreneur, the most important reward may be the independence it gains and the subsequent satisfaction of its personal material wealth. The logical theory of entrepreneurial decision-making effect points out that entrepreneurship is an iterative process in which entrepreneurs constantly adjust their understanding and decision-making of entrepreneurial output, and opportunities and environment evolve together in this process and finally gradually form entrepreneurial products and services [19].

2.2. Problems and risks faced by entrepreneurship

Entrepreneurship is a task full of challenges and risks. Entrepreneurs represented by college students will encounter a variety of problems and challenges. Developing business ideas and visions, raising money for start-ups, and finding the right business location are common internal challenges for new entrepreneurs [20], and external challenges are often unforeseen. Some of the common entrepreneurial issues are discussed in detail below.

(1) Fund-raising and management issues

The first is the initial fundraising, and entrepreneurs usually need a certain amount of start-up capital to support their business. This may include product development, marketing, rent, wages, etc. Raising sufficient initial funding can be a challenge, especially for start-ups without rich financial resources. In the process of starting a business, you will also face the problem of cash flow management. Even after the business starts operating, cash flow management is also an important issue. Ensuring enough capital flows to pay for daily expenses and accounts payable while avoiding overspending is key to success. Entrepreneurs can prove the feasibility of their ideas, but often there is not enough money to commercialize them, thus bringing certain risks to entrepreneurship. Often, only a few funds are willing to encourage entrepreneurs to cross the gap, such as venture investment by wealthy individuals specializing in early-stage projects and government-funded programs.

(2) Market competition problems

In terms of market positioning, it is an important problem to determine the target market and accurately locate it. If the market positioning is not accurate, the product or service may not attract enough customers. In many industries, the competition is very fierce. How to stand out in the competition and attract and retain customers is the challenge that entrepreneurs need to face.

(3) Team building and operation problems

Finding a suitable team is the key to the success of entrepreneurship. By carrying out enterprise practice, cooperating with experienced entrepreneurs, and participating in seminars and practices of high-quality teachers, the Internet entrepreneurship of higher students can be promoted [21]. Therefore, the entrepreneurial spirit of team members can be improved through the above measures. Recruiting people with relevant skills and experience and ensuring that they can integrate into the team culture is an important issue. In terms of team management, it may become more complex as the business grows. How to ensure effective communication, cooperation, and

motivation between team members is a problem that entrepreneurs need to pay attention to.

(4) Technical problems

Technology selection: Choosing an appropriate business development for the technology stack and tools is an important issue. Technology maturity, cost, scalability, and other factors need to be considered. In the process of converting the process of converting the expected products into commercial products (mass production of products), with effective performance, low cost, and high quality products, the process of surviving the market competition requires a lot of complex and costly research work (sometimes a few years) to form the entrepreneurial risk.

(5) Innovation and adaptability

Continuous innovation: In a rapidly changing market environment, continuous innovation is the key to maintaining competitiveness. Entrepreneurs need to pay attention to industry trends and technology development trends and adjust their business strategies over time. Adapt to market changes: the market environment and customer needs may change with time and the external environment. Entrepreneurs need to have keen insight and timely adjust the business direction and strategies to adapt to market changes.

In addition to the above, the lack of management experience for college students makes it difficult to find good entrepreneurial projects, which is also a challenge facing entrepreneurship [22]. In addition, Martijn A. Boermans proposes that the degree of risk perception is positively correlated with the business performance of entrepreneurs [23], that is, the higher the results college students achieve in the process of starting a business, the higher their risk perception, while those with poor entrepreneurs have poor risk perception.

2.3. Theoretical research on entrepreneurship

At present, the theoretical research achievements on “entrepreneurship” are rich, which reveal the essence and success elements of entrepreneurship from different perspectives.

Entrepreneurship emphasizes the importance of innovation, believing that entrepreneurs break the market balance by introducing new products, services, or technologies and creating new business opportunities. This spirit of innovation is at the core of entrepreneurial activities, promoting sustainable economic development and social progress. The national policy to support college students’ entrepreneurship can further relieve the employment pressure of colleges and universities [24], so as to promote the sustainable development and progress of the whole social economy.

At the same time, entrepreneurship also focuses on the personal characteristics and abilities of entrepreneurs. Successful entrepreneurs often have a firm belief, keen market insight, excellent leadership, and strong risk tolerance. These characteristics enable them to make decisions quickly in an uncertain market environment and seize opportunities to achieve rapid growth of enterprises. Because college students lack these abilities, they have certain risks in the process of starting a business. In addition, the entrepreneurial theory also studies the factors affecting the entrepreneurial environment. External conditions such as policy support, social network, market

demand and resource access have an important impact on the success or failure of entrepreneurial activities. Variables such as investment, industry, start-up scale, founder education level, and employee education level can also affect the innovation and success rate of start-ups [25]. In addition, the green economy will affect innovation and entrepreneurship [26,27].

To sum up, the research results of entrepreneurial theory reveal the multidimensional nature and complexity of entrepreneurial activities. To start a successful business, college students need to have an innovative spirit, personal characteristics, and abilities and make full use of external resources to cope with market challenges. These theoretical achievements provide useful guidance for college students to start their own businesses and help them make wiser decisions and actions on the road to entrepreneurship. College students have learned to write business models and business plans through innovation and entrepreneurship competitions and innovation and entrepreneurship courses, which is conducive to integrating resources, building a fault-tolerant mechanism, and perceiving and preventing risks, which is of great help to their future entrepreneurship. Therefore, from the perspective of business model and business plan, this paper explores the help and significance of business model and business plan for entrepreneurship.

3. Business model and its application in entrepreneurship

3.1. Concept and theoretical research of business model

3.1.1. Concept definition and understanding of business model

A business model is the process that describes how an enterprise creates value, transmits value, and obtains value. It involves how companies identify market opportunities, design products or services, build relationships with partners, market and sell products or services, and manage and optimize the entire value creation process. The usefulness and predictability of business models promise to help entrepreneurs make more informed decisions that increase their chances of success [28].

The business model is the embodiment of enterprise strategy, which covers the enterprise's products, services, market positioning, customer relations, revenue sources, and key business activities. These elements are interrelated and together constitute the unique value creation and acquisition system of the enterprise. The key to understanding a business model is to grasp its integrity and dynamics. Integrity means that each component of the business model must be coordinated and supported by each other in order to form an effective value creation and acquisition mechanism. Dynamics emphasizes that business models must be constantly adjusted and innovated to meet the changing market environment and customer needs.

A successful business model should provide clear answers to the following questions: Who do companies create value for? What kind of value is created? How do you create value? How do you convey the value? And how do you benefit from the process of creating value? Answering these questions requires a deep understanding and accurate judgment of the market, customers, competitors, and their own capabilities. In short, the first is the rationality of the business model, that is, the ability

to care about the reasonable demands of all stakeholders, which is the cornerstone of the stability of the business model [29], which determines whether an enterprise can stand out in the fierce market competition. Therefore, enterprises must attach great importance to the construction and innovation of business models and constantly seek new ways of value creation and acquisition to adapt to the changing market environment.

3.1.2. Theoretical research on business model

(1) The components of the business model

The highly inconsistent concept of a business model results in the inconsistency of the constituent elements. Representative ones, Jonas Hedman et al., should include organizational resources, competitors and customers, etc. Gary Hammer believes that there should be four aspects: value network, core strategy, strategic resources, and customer interface. Other representative concepts are the three elements of the business model proposed by Amit and Zott, including content, transaction control, and structure. Afuah and ucci proposed that the business model should include revenue, ability, customer value, and so on, which can be applied in the traditional business model on the network.

(2) Research on the types of business models

The business model originating from EC can be divided into two types: B2C and B2B. Morris According to the growth period of the enterprise, it is divided into three levels, namely the basic layer, unique layer, and rule layer, and each layer includes six elements. The basic layer indicates that during the import period, the unique layer indicates the growth period, and the regular layer indicates the maturity period. Huang and Chen believe that they should be divided into three levels, respectively. In essence, the business model contains the creation of enterprise value.

(3) Market opportunity to pull the momentum

Business models generate momentum in order to seize market opportunities. Lindgardt et al. believe that innovation can bring unique business opportunities to enterprises. Through the conclusion, economic regression contains unlimited business opportunities, which can make enterprises revitalize [30]. As a result, they concluded that companies had highly agreed on innovative business models at the time of the financial crisis. Innovation behavior in specific periods is more important and more explanatory. There are many reasons for innovation and radiating enterprises, but its core is one: to maximize the value of enterprises, and the rest are external forms.

(4) Business models need to be innovated urgently

In order to adapt to the rapidly changing business environment, enterprises must constantly innovate. The pre-driven business model can better adapt to the continuous, dynamic, and radical changes in the business environment. Sosna et al. believe that the sustainability of specific business models should be viewed in the long run, and only continuous innovation can make enterprises invincible [31]. Although many experts and scholars at home and abroad agree with this point, the internal mechanism of the business model has not been well explained, which affects its enterprise innovation.

(5) The core strategy of business model development

Value innovation as the soul, to occupy the customer as the center, the economic alliance as the carrier, strain capacity as the key, the information network as the platform of the soul of the business model breakthrough development is the value innovation, with the help of business model this platform to maximize value, business model innovation is a new enterprise to avoid homogeneity competition, realize the key to survival and rapid development [32]. In consumers, consider immediate interests, from this perspective to observe, only the competition perspective into the user, to enter the competition space: Wang pointed out that the development of the business model core is economic alliance as the carrier, but due to the value of the curve, a third from the enterprise, two-thirds from enterprises, through cooperation between each other, to create greater value and make the form more competitive. With the continuous innovation of business models, without the information network, enterprises will eventually be competitive at all.

3.2. Application of business model in entrepreneurship

The realization of entrepreneurial opportunities also needs the support of specific actual behaviors of entrepreneurs. Through comprehensive utilization of various resources, optimization of resource allocation to carry out specific entrepreneurial measures, planning, and coordination to achieve the expected value goals and profit purposes [33], The innovation of business models plays a positive role in improving enterprise performance so as to effectively improve the success rate of entrepreneurship. The implementation of efficient business model innovation by entrepreneurs has a significant role in improving their growth performance [34]. A business model is a potential resource to obtain a competitive advantage. Enterprises can obtain a competitive advantage through their business model. A novel and effective business model can promote the excellent value creation of enterprises. Through empirical analysis, Wu proved that business model innovation plays a positive intermediary role between entrepreneurship and company performance [35]. Cavallo et al. first attempt to establish the theoretical basis and positioning of growth hackers in business model research [36]. The IBM Business Value Institute concluded that outperforming companies innovate their business models more frequently than underperforming companies and that business model innovation can help companies increase gross margin growth by 5% higher than their competitors. 69% of the global CEOs say they are very concerned about business model innovation; almost all CEOs have implemented business model innovation to varying degrees, and the outstanding business model innovation is more thorough. Bachmann et al. proposed a conceptual process model for existing enterprise BMI, which promoted the sustainable development of BMI from a process perspective [37].

Future returns on investments in new products and services are always uncertain. The continuous reduction of technical barriers will also encourage industrial homogenization competition [38]. Unwilling to make such big bets, more companies are now turning to business model innovation as an alternative or complement to product or process innovations [39]. Therefore, entrepreneurs represented by college students should turn their focus to the business model when innovating. Enterprises should build a customer-value-oriented business circle [40], and business model

innovation is conducive to promoting this view. New enterprises should actively carry out legalization management strategies while implementing business model innovation. Active legal management, the recognition and support of society, and the improvement of their own legitimacy level are the key links to the impact of business model innovation on the performance of new enterprises and play an important role in the successful implementation of the business model.

4. Business plan and its application in entrepreneurship

4.1. Concept and how to develop the business plan

4.1.1. Concept definition and understanding of the business plan

A business plan is a written document detailing the development plan and strategy of an enterprise. It is mainly used to demonstrate the potential and value of a business to investors, partners, banks, and other stakeholders to attract capital, talent, and other resources, so it is extremely important for a business to develop a business plan. The business plan is not only focused on the current situation of the enterprise but also on its future development. It requires enterprises to have a clear understanding of their own market environment, competitive position, and resource ability and, on this basis, to develop feasible development strategies. A business plan is a dynamic process that needs to be adjusted and optimized according to market changes and enterprise development. It is not only a tool for enterprises to show their own value to the outside world but also an important basis for their internal management, coordination, and decision-making. The complexity of business plans makes them difficult to use in the business field, and this proposed approach can contribute to a business plan or innovation in a practical way [41]. So it's important to start a business and make a business plan.

Understanding a business plan: a business plan is a combination of enterprise strategy and tactics. It should not only have macro-strategic planning, such as market positioning and competitive strategy, but also have a specific tactical implementation plan, such as marketing activities, production arrangements, etc. A business plan is a bridge between enterprises, investors, and partners. Through business plans, enterprises can show their potential and value to the outside world, thus attracting more resources and cooperation opportunities. Business plans develop entrepreneurial skills and increase the necessary capabilities for different entrepreneurial trips [42]. A business plan is a systematic project. It requires enterprises to comprehensively analyze their own advantages and disadvantages, market opportunities, and threats from various perspectives and formulate corresponding development strategies and implementation plans. At the same time, the business plan also needs to be combined with the daily operation and management of the enterprise to ensure the implementation of the plan. Business plans need to be constantly updated and refined. As the market environment changes and the business itself develops, something in the business plan may no longer be applicable. Therefore, companies need to regularly review and adjust their business plans to ensure that they are always consistent with the company's development goals.

4.1.2. How to make a business plan

A great business plan is a plan focused on a range of issues. These questions address four factors that are critical to the success of each new business: personnel, opportunity, background, and the possibility of risk and reward. There are two key components of the business planning process: the expression of a feasible business model and managing the growth and expansion of the business [43]. Making a business plan is a crucial step in the business process, which not only helps entrepreneurs define their goals and strategies but also serves as a tool to attract investors. Here are some suggestions on how to develop a business plan:

A business plan usually includes the following parts: cover and catalog, company overview, market analysis, product or service description, marketing and sales strategies, organizational structure and management teams, financial forecasts and funding requirements, risk assessment and coping strategies, appendix, etc. When developing a business plan, it is necessary to understand the role and content of each part to ensure the integrity and logic of the plan.

Clear goals and strategies: Before making a business plan, entrepreneurs need to define their goals and strategies. This includes identifying the company's mission, vision, and values, as well as setting short- and long-term goals and plans. Objectives and strategies need to be specific, feasible, and measurable to be clearly presented in the plan.

Market research and analysis: The business plan requires in-depth analysis and research of the market. This includes understanding the needs and preferences of target customers, competitors, market size, and growth trends. Through market research and analysis, entrepreneurs can better grasp market opportunities and risks and provide a basis for the development of marketing strategies and financial forecasts.

Highlight the strengths of a product or service: A business plan needs to fully describe the characteristics, strengths, and differentiation of a product or service. This helps to attract investor attention and make them believe that the product or service is market-competitive. When describing products or services, we need to pay attention to objectivity and authenticity and avoid exaggeration or false propaganda.

Develop marketing and sales strategies: The business plan needs to define the marketing and sales strategies, including target customers, market positioning, promotion channels, sales channels, pricing strategies, etc. These strategies need to match the company's goals and market conditions to ensure that products or services can be effectively promoted and sold.

Financial forecast and capital demand analysis: The business plan needs to forecast and analyze the company's financial position, including revenue, cost, profit, cash flow, etc. At the same time, it needs to analyze the capital needs and sources in order to provide sufficient financial support for the development of the company. In the financial forecast and capital demand analysis, market changes, competitive situations, and other factors should be fully considered to ensure the rationality and feasibility of the forecast.

In short, making a business plan requires a comprehensive consideration of all aspects of the company to ensure the integrity and logic of the plan.

4.2. The application of business plans in entrepreneurship

College students have problems with a lack of overall digital literacy and low entrepreneurial alertness [44], and making a sound business plan can make entrepreneurs think deeply about the risks they may encounter and improve their entrepreneurial alertness. Through the above understanding of how to make a business plan and how to make it, the following six points summarize the application of a business plan in entrepreneurship.

- 1) Clear up the entrepreneurial thinking. Having a good idea is just the beginning of starting a business. Entrepreneurs have too many things to do in order to achieve this idea. And you will inevitably face brutal market competition. There are many obstacles and difficulties that will appear at any time that you have never thought of. War requires strategy, and entrepreneurship, while not that demanding, requires at least a roadmap. A business plan is a roadmap for entrepreneurs. By writing a business plan, founders can comprehensively check their ideas, find problems, and add omissions.
- 2) Resource integration. Internal entrepreneurship theory refers to the creation of new businesses by utilizing the products, technology, personnel, and capital resources within the existing organization so as to improve the competitiveness and profitability of the organization [45]. Investors should take existing resources into account when making a business plan and plan to allocate existing resources reasonably. College students should learn to use the accumulated contacts and other resources in colleges and universities so as to improve the success rate of entrepreneurship.
- 3) The carrier should contact the investors. Although the best way to contact investors is still being introduced, most entrepreneurs don't have it. They can't just go to their investors' offices to find them, so many entrepreneurs choose to email their investors. Of course, some entrepreneurs also participate in various activities that can reach investors to seek opportunities to promote projects. But this meeting time is too short; it is difficult to give investors a comprehensive understanding of a project.
- 4) Planning for companies and projects. A brewing project is often vague, and through the writing of a business plan and venture capital plan, a complete and feasible venture capital plan can be put on paper. To become the action guide for start-ups and the "golden key" to attract investment.
- 5) Access to venture capital investment. A good business plan is the key to making an investment. How to attract investors, especially venture investors, to participate in entrepreneurs investment projects, then a high-quality and rich content of the business plan to the company and the advantages of the project, potential, operational ideas, and business model such as a perfect show to investors, will make investors faster, better understand the investment projects, have confidence in the project, enthusiasm to get its favor, mobilize investors to participate in the project, and eventually raise funds for the project.

In addition, according to the research, potential college student entrepreneurs pay more attention to business plans than experienced entrepreneurs [46], indicating that college students have begun to pay attention to the development of business plans in the process of entrepreneurship.

5. Summary analysis

5.1. Summary

5.1.1. Connection between business model and business plan

Business model and business plan are closely linked in entrepreneurship, and they together form the foundation of entrepreneurial success. A business model is at the heart of a business plan. The business model describes how an enterprise creates value, transmits value, and obtains value. It determines the way an enterprise operates, the characteristics of the product or service, the market positioning, and the way it makes profits. It also focuses on the value creation of both the demand side and the supply side [47]. Some scholars use the business model canvas to guide students in making business plans [48]. A business plan is a specific implementation plan formulated based on a business model, including target setting, market strategy, marketing strategy, operation strategy, etc. Therefore, a business model is the core of a business plan, and the business plan needs to be formulated under the guidance of the business model.

A business plan is the execution plan for the business model. Business plan A business plan is the refinement and embodiment of the business model. It describes in detail how an enterprise implements the business model, including the specific action plan, schedule, resource allocation, etc. Business plans need to ensure the effective implementation of business models and provide specific guidance for the development of enterprises.

The business model and the business plan jointly determine the success of the enterprise. The innovation and feasibility of the business model determine the competitiveness and profitability of an enterprise, while the effective implementation of the business plan determines whether the enterprise can realize the potential of the business model. Therefore, the business model and the business plan jointly determine the success of an enterprise. In the process of starting a business, entrepreneurs need to constantly optimize their business models and business plans to adapt to the needs of market changes and enterprise development.

Business models and business plans need to adjust to each other. As the market changes and the enterprises develop, the business models and plans may need to be adjusted accordingly. Business models may need to be optimized to meet changes in market demand, while business plans will need to be tailored to ensure that companies can grow in line with their stated goals. Therefore, in the process of starting a business, entrepreneurs need to continuously pay attention to market changes and enterprise development and timely adjust and optimize their business models and business plans.

In short, business models and business plans are closely linked in entrepreneurship, and they together form the foundation of business success. Entrepreneurs need to fully consider the characteristics and needs of the business model when making a business plan and constantly optimize the business model to meet the needs of market changes and business development.

5.1.2. Summary of the application of business model and business plan in entrepreneurship

The innovation of business models plays a positive role in improving enterprise performance. A positive business model can help enterprises recognize who to create value, what kind of value, how to create value, how to deliver value, and other issues so as to improve the operation efficiency of enterprises. Enterprises can also obtain competitive advantages and competitive resources through business models. According to the literature reviewed, more and more companies are now turning to business model innovation as an alternative or supplement to product or process innovation, so the business model is playing an increasingly important role in the process of entrepreneurial application.

Making a sound business plan can enable entrepreneurs to think deeply about the risks they may encounter and improve their entrepreneurial vigilance. A sound business plan can improve the overall operation efficiency of the enterprise and the enthusiasm of employees. The business plan mainly plays a positive role in the process of entrepreneurial application by clarifying entrepreneurial ideas, integrating resources, connecting investors, planning companies and projects, and obtaining venture capital. In addition, relevant scholars point out that potential college entrepreneurs pay more attention to business plans than other entrepreneurs, so it can be seen that business plans are also valued by young entrepreneurs.

5.2. Analysis

5.2.1. The development trend of business model and business plan in entrepreneurship

The future trends of business models and business plans in the entrepreneurial field may be influenced by a variety of factors, including technological advances, changing consumer demand, market competition, and the global economic environment. Here are some prospects for the future development trend:

(1) Digitization and intelligence trend: With the rapid development of big data, artificial intelligence, the Internet of Things, and other technologies, the future business model will pay more attention to digitalization and intelligence. Companies can make more refined business plans by collecting and analyzing large amounts of data to more accurately understand consumer needs and market trends. At the same time, intelligent technology can also help enterprises optimize their operational processes, improve efficiency, and reduce costs.

(2) The trend of personalization and customization: With the diversification and personalization of consumer needs, the future business model will pay more attention to the personalization and customization of products and services. Enterprises need to provide customized products or services according to consumers' needs and preferences. More market research and consumer insights may be included to determine the needs and preferences of target consumers and to develop appropriate product or service strategies.

(3) Flexibility and adaptability trend: In the face of the rapidly changing market environment, the future business model will pay more attention to flexibility and adaptability. Companies need to be able to quickly adjust their business plans to adapt to changing markets. Therefore, more flexibility and adaptive strategies such as agile development, rapid iteration, etc. may be included in business plans.

In short, the future trends of business models and business plans are likely to focus more on digitalization, intelligence, sustainability, personalization, customization, platform, ecology, flexibility, and adaptability. Through the above discussion, a good business model and business plan can improve the success rate of entrepreneurship and help enterprises achieve higher performance, as represented by college students. Entrepreneurs need to pay close attention to market changes and technology development trends, pay attention to the changing trends of their business models and business plans, and constantly optimize and adjust their business models and business plans to adapt to future market competition and consumer demand so as to promote the success of entrepreneurship.

5.2.2. Suggestions for college students in the formulation of a business model and business plan

To sum up, on the road to entrepreneurship, the development of a business model and a business plan is crucial.

First, an in-depth understanding of the market and customer needs is the basis for developing a successful business model. The basic dimensions of a business model are resource structure, transaction structure, and value structure. Therefore, a perfect business model can help college students and all entrepreneurs coordinate resources and predict market value in the process of entrepreneurship. Through market research, entrepreneurs can better grasp the market trend and competition situation so as to find an accurate positioning for their products or services.

Secondly, college students need to keep their innovative thinking and constantly explore new business models. In a competitive market, the traditional business model may be difficult to foothold, so it needs to have the courage to try new business models and seek the advantages of differentiated competition.

When making business plans, college students need to pay attention to the feasibility and operability of the plan. A business plan requires not only clear goals and strategies but also specific action plans and schedules. At the same time, it is also necessary to consider the reasonable allocation of resources and risk management to ensure the smooth implementation of the plan.

In addition, college students also need to keep learning and improve their abilities. The development of business models and business plans is a complex process that requires rich knowledge and experience from entrepreneurs. Therefore, college students need to continue to learn new knowledge and new skills to improve their comprehensive quality and ability level.

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References

1. Huang Y. Research on the precise employment path of college graduates under the perspective of the integration of industry and education: Take Hubei Province as an example (Chinese). *Jiangsu Commercial Forum*. 2024; (3): 119-123. doi: 10.13395/j.cnki.issn.1009-0061.2024.03.014
2. 36 Kr Research Institute. 2021 China Hardcore Entrepreneurs Research Report (Chinese). 36 Kr Research Institute; 2021.
3. Li W, Zhu J, Huang J, Zhao Y. Some thoughts on the Opinions of the Ministry of Education on Vigorously Promoting the Innovation and Entrepreneurship Education in Higher Education and College Students' Self-entrepreneurship work (Chinese). *Journal of Fujian Business University*. 2012; 2: 26-29. doi: 10.19473/j.cnki.1008-4940.2012.02.006
4. Tang C, Shi Y. Entrepreneurship failure education in colleges and universities: Concept analysis, value implication and path design (Chinese). *Journal of Entrepreneurship in Science & Technology*. 2024; 37(1): 161-165.
5. The CPC Central Committee and The State Council. *Medium-and Long-term Youth Development Plan (2016-2025)* (Chinese). The CPC Central Committee and The State Council; 2017.
6. Xue Y, Zeng Z. Research on the construction of environmental monitoring index system for youth innovation and entrepreneurship development: Based on practical exploration in Guangzhou (Chinese). *Urban Insight*. 2024; 1: 135-145+163.
7. Xie G, Guo W, Fang J, Chen X. How to solve the "teasability dilemma" in college entrepreneurship education: Based on the promotion mechanism of entrepreneurial willingness (Chinese). *Journal of Entrepreneurship in Science & Technology*. 2024; 37(1): 166-171.
8. Wang Y. Analysis of the reasons and countermeasures of college students' entrepreneurial failure (Chinese). *Journal of Entrepreneurship in Science & Technology*. 2018; 31(4): 90-92.
9. Liu G, Ma L. The dilemma and countermeasures of college students' employment and entrepreneurship under the new employment form (Chinese). *China Employment*. 2024; (1): 59-61. doi: 10.16622/j.cnki.11-3709/d.2024.01.017
10. Ping Y. Analysis on the causes of entrepreneurial failure and Countermeasures (Chinese). *Journal of Chuzhou Polytechnic*. 2018; 17(4): 24-26.
11. Li H. Analysis of the reasons and countermeasures of college students' entrepreneurial failure (Chinese). *Survey of Education*. 2017; 6(11): 43-44. doi: 10.16070/j.cnki.cn45-1388/g4s.2017.11.018
12. Xiang S, Yao Y. Analysis on the causes of university entrepreneurship failure and countermeasures (Chinese). *Survey of Education*. 2016; 5(5): 50-51. doi: 10.16070/j.cnki.cn45-1388/g4s.2016.09.022
13. Wang Y, Du Y. Analysis of the reasons for the "super high" failure rate of college students' entrepreneurship in China and discussion on solutions (Chinese). *Modern Economic Information*. 2016; 5: 414-415.
14. Li W. Based on the analysis of the entrepreneurial failure cases of college students in Ningbo (Chinese). *Journal of Chifeng University (Natural Science Edition)*. 2014; 30(21): 179-180. doi: 10.13398/j.cnki.issn1673-260x.2014.21.086
15. Hou H. Analysis of the causes of college students' entrepreneurial failure and its countermeasures (Chinese). *Journal of Entrepreneurship in Science & Technology*. 2013; (9): 20-21.
16. Chen J, OuYang S. Research on the optimization path of innovation and entrepreneurship ability cultivation of science and technology college students (Chinese). *Journal of Heilongjiang Institute of Teacher Development*. 2024; 43(2): 49-54.
17. Ning D. Fault-tolerant mechanism of college students' entrepreneurship: connotation, dilemma and construction (Chinese). *Journal of Nanjing University of Science and Technology (Social Sciences)*. 2024; 37(1): 80-84+92. doi: 10.19847/j.ISSN1008-2646.2024.01.011
18. Shi G. Innovation, entrepreneurship, entrepreneurship and youth development (Chinese). *Youth Development Forum*. 2017; 27(2): 3-10.
19. Yu J, Ming Q, Zhang Y, Jin J. Digital entrepreneurship: a new trend in entrepreneurship theory and practice in the digital age (Chinese). *Studies in Science of Science*. 2018; 36(10): 1801-1808. doi: 10.16192/j.cnki.1003-2053.2018.10.010
20. Fong EY, Jabor MKB, Zulkifli AH, Hashim MR. Challenges faced by new entrepreneurs and suggestions how to overcome them. In: *Proceedings of the International Conference on Student and Disable Student Development 2019; 29th November – 1st December 2019; Johor Bahru, Malaysia*. pp. 223-227.
21. Samašonok K, Išoraitė M, Leškienė-Hussey B. The internet entrepreneurship: opportunities and problems. *Entrepreneurship and Sustainability Issues*. 2016; 3: 329-349.
22. Han F, Pan S. Opportunities and challenges of college students' innovation and entrepreneurship under the background of

- “Internet +” (Chinese). *Co-Operative Economy & Science*. 2019; 18: 118-119. doi: 10.13665/j.cnki.hzjyjkj.2019.18.045
23. Boermans MA, Willebrands D. Entrepreneurship, risk perception and firm performance. *International Journal of Entrepreneurship and Small Business*. 2017; 31(4): 557-569. doi: 10.1504/ijesb.2017.085426
 24. Bi X. Study on the related factors of entrepreneurial self-efficacy among college students in Hunan Province (Chinese). *The Theory and Practice of Innovation and Entrepreneurship*. 2024; 7(2): 1-4.
 25. Aminova M, Marchi E. The role of innovation on start-up failure vs. its success. *International Journal of Business Ethics and Governance*. 2021; 41-72. doi: 10.51325/ijbeg.v4i1.60
 26. Yin S, Liu LR, Mahmood T. New Trends in Sustainable Development for Industry 5.0: Digital Green Innovation Economy. *Green and Low-Carbon Economy*. 2023. doi: 10.47852/bonviewglce32021584
 27. Yin S, Gao Z, Mahmood T. Artificial intelligence-driven bioenergy system: digital green innovation partner selection of bioenergy enterprises based on interval fuzzy field model. *Kybernetes*. 2023. doi: 10.1108/k-08-2023-1495
 28. Trimi S, Berbegal-Mirabent J. Business model innovation in entrepreneurship. *International Entrepreneurship and Management Journal*. 2012; 8: 449-465. doi: 10.1007/s11365-012-0234-3
 29. Zhang JH. Research on the business model of online car-hailing derivative advertising from the perspective of industry chain. *Jiangsu Commercial Forum*. 2024; 3: 8-12. doi: 10.13395/j.cnki.issn.1009-0061.2024.03.012
 30. Lindgardt Z, Reeves M, Stalk G, Deimler MS. Business Model Innovation: When the Game Gets Tough. *Change the Game*. 2009; 12(9).
 31. Sosna M, Trevinyo-Rodríguez RN, Velamuri SR. Business model innovation through trial-and-error learning: The Naturhouse case. *Long range planning*. 2010; 43(2): 383-407. doi: 10.1016/j.lrp.2010.02.003
 32. Wang L, Zhao W, Kong L, et al. Cognitive style, entrepreneurial resilience and business model innovation of new enterprises (Chinese). *Management Review*. 2023; 35(10): 135-145. doi: 10.14120/j.cnki.cn11-5057/f.2023.10.024
 33. Zhao M, Gao X. Perspective and reflection of college Students' innovation and entrepreneurship education from the perspective of “Internet +” (Chinese). *Journal of Jilin Engineering Normal University*. 2021; 37(6): 18-20.
 34. Wei Y. Empirical study on the impact of efficient business model innovation on the growth performance of entrepreneurial enterprises: The fault zone of senior management team (Chinese). *Journal of Entrepreneurship in Science & Technology*. 2024; 37(1): 56-63.
 35. Wu SL, Luo YJ, Zhang H, Cheng P. Entrepreneurial bricolage and entrepreneurial performance: The role of business model innovation and market orientation. *Heliyon*. 2024; 10(4): e26600. doi: 10.1016/j.heliyon.2024.e26600
 36. Cavallo A, Cosenz F, Noto, G. Business model scaling and growth hacking in digital entrepreneurship. *Journal of Small Business Management*. 2023; 1-28. doi: 10.1080/00472778.2023.2195463
 37. Bachmann N, Jodlbauer H. Iterative business model innovation: A conceptual process model and tools for incumbents. *Journal of Business Research*. 2023; 168: 114177. doi: 10.1016/j.jbusres.2023.114177
 38. Wang X, Li B, Yin S, Zeng J. Formation mechanism for integrated innovation network among strategic emerging industries: Analytical and simulation approaches. *Computers & Industrial Engineering*. 2021; 162: 107705. doi: 10.1016/j.cie.2021.107705
 39. Amit R, Zott C. Creating value through business model innovation. Available online: <https://sloanreview.mit.edu/article/creating-value-through-business-model-innovation/> (accessed on 12 December 2023).
 40. Yin S, Zhao Y. Digital green value co-creation behavior, digital green network embedding and digital green innovation performance: moderating effects of digital green network fragmentation. *Humanities and Social Sciences Communications*. 2024; 11(1): 1-12. doi: 10.1057/s41599-024-02691-5
 41. Lv X, Wang Y, Liu L, et al. Digital green innovation economy for Industry 5.0. *Sustainable Economies*. 2024; 2(1): 8. doi: 10.62617/se.v2i1.8
 42. Souto JE, Rodríguez-López Á. Entrepreneurial learning in an experiential and competences training context: A business plan in Bachelor thesis. *The International Journal of Management Education*. 2021; 19(3): 100513. doi: 10.1016/j.ijme.2021.100513
 43. Tanev S, Rasmussen ES, Hansen KR. Business plan basics for engineers and new technology firms. *Start-Up Creation*. 2020; 19-40. doi: 10.1016/b978-0-12-819946-6.00002-3
 44. Yang Z, Zhang L. Research on college students' entrepreneurial opportunity identification ability under the background of digital economy (Chinese). *Journal of Science and Education*. 2024; 1: 20-23. doi: 10.16871/j.cnki.kjwh.2024.01.005
 45. Chen, J. Research on entrepreneurship education mode in colleges and universities from the perspective of internal

- entrepreneurship theory (Chinese). *Education and Vocation*. 2018; 1: 54-61. doi: 10.13615/j.cnki.1004-3985.2018.01.010
46. Ferreira ADSM, Loiola E, Gondim SMG. Motivations, business planning, and risk management: entrepreneurship among university students. *RAI Revista de Administração e Inovação*. 2017; 14(2): 140-150. doi: 10.1016/j.rai.2017.03.003
47. Massa L, Tucci CL, Afuah A. A critical assessment of business model research. *Academy of Management annals*. 2017; 11(1): 73-104. doi: 10.5465/annals.2014.0072
48. Holdford DA, Pontinha VM, Wagner TD. Using the business model canvas to guide doctor of pharmacy students in building business plans. *American Journal of Pharmaceutical Education*. 2022; 86(3): 8719. doi: 10.5688/ajpe8719