THE IMPACT OF INTERNET EMBEDDEDNESS ON RESOURCE IDENTIFICATION —— THE MEDIATORS ROLE OF ENTERPRENEURIAL LEARNING

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2024

THE IMPACT OF INTERNET EMBEDDEDNESS ON RESOURCE IDENTIFICATION —— THE MEDIATORS ROLE OF ENTERPRENEURIAL LEARNING

by

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Thesis submitted in fulfillment of the requirements
for the degree of
Master of Arts

June 2024

ACKNOWLEDGEMENT

In the preface, I would like to express my sincere gratitude to the people who involved directly or indirectly contributed to the success of my master journey. First and foremost, I am deeply grateful to my supervisor, our Dean and mother of SOM, Professor Dr. Noor Hazlina Ahmad. Your guidance, patience and brilliant feedback are very valuable to me to go through this challenging journey. My sincere and heartfelt thanks to all examiners, Prof. Dr. Hasliza Abdul Halim ,Prof. Dr. Selvan Perumal to highlight the areas for improvement and provide insightful comments to improve the quality and value of the thesis.I would like to extend my appreciation and profound gratitude to the lovely supporting staffs, Mrs. Rosnah Mohamad Salehto and Mrs. Robitah Spian to assist me with the administrative processes, and also the staffs who extended their kind assistance to me throughout the master journey.Last but not least, thanks to all of my wonderful friends in the SOM group and those we met in the School of Management for your kind suggestions and memorable memories.

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KESAN KETERIKATAN INTERNET TERHADAP IDENTIFIKASI SUMBER: PERANAN PEMBELAJARAN KEUSAHAWANAN SEBAGAI PENGANTARA

ABSTRAK

Pengenalpastian sumber sentiasa menjadi isu penting yang dihadapi oleh perusahaan. Dalam proses memulakan perniagaan, usahawan mesti memikirkan sumber yang diperlukan oleh syarikat pada peringkat semasa dan pada masa hadapan. Usahawan boleh menggunakan kaedah pengenalan yang berbeza mengikut ciri-ciri sumber dan tahap pembangunan perusahaan, dan akhirnya mengenal pasti sumber yang diperlukan dan kemudian mendapatkan sumber, yang meletakkan asas untuk pembangunan selanjutnya perusahaan.Dalam beberapa tahun kebelakangan ini, orang ramai telah menggunakan teknologi Internet, dan semakin ramai usahawan memperoleh sumber keusahawanan dan menjalankan aktiviti keusahawanan melalui Internet. Proses mengenal pasti sumber memerlukan banyak pengetahuan, yang boleh diperoleh melalui pembelajaran keusahawanan. Usahawan mengubah pengetahuan keusahawanan kepada keupayaan, meningkatkan keupayaan mengenal pasti sumber, dan meletakkan asas yang baik untuk penyepaduan sumber dalam aktiviti keusahawanan masa hadapan. Rangka kerja teori kajian ini adalah berdasarkan teori UET dan menggabungkan konsep seperti Internet embed, pengenalpastian sumber, dan pembelajaran keusahawanan.Berdasarkan penyelidikan ini, 10 hipotesis dicadangkan untuk meneroka kesan keterlibatan Internet embedterhadap pengenalpastian sumber dan mengesahkan peranan

pengantara pembelajaran keusahawanan. Dalam kajian empirikal, tinjauan soal selidik dalam talian digunakan untuk meninjau usahawan daripada 170 syarikat di Shanghai. Selepas menghapuskan soal selidik yang tidak sah, 151 soal selidik yang sah telah diperolehi. Kajian ini menggunakan perisian analisis statistik SPSS27.0 untuk menganalisis lebih lanjut data yang dikumpul. Dengan menjalankan analisis kebolehpercayaan, analisis faktor, analisis korelasi, analisis regresi linear, analisis regresi hierarki dan kaedah lain ke atas data yang diperolehi, 10 hipotesis yang dicadangkan dalam kajian ini telah disahkan, dan disahkan bahawa Internet embed mempunyai kesan positif. pada pengenalpastian sumber. pembelajaran keusahawanan memberi impak positif kepada pengenalpastian sumber,kesan kepada pengenalpastian sumber dan keusahawanan memainkan peranan peting antara Internet embed dan pengenalpastian sumber.

THE IMPACT OF INTERNET EMBEDDEDNESS ON RESOURCE IDENTIFICATION -- THE MEDIATING ROLE OF ENTERPRENEURIAL LEARNING

ABSTRACT

With the development and application of Internet technology, more and more entrepreneurs obtain entrepreneurial resources through the Internet to carry out entrepreneurial activities. Resource identification is the key to the growth of new startups. In the process of entrepreneurship, entrepreneurs must solve the problem of how at what cost, and where to obtain resources. According to the characteristics of resources and the stage of enterprise development, entrepreneurs can use different identification methods to finally identify the required resources and then obtain resources, which lays the foundation for the further development of enterprises. In the process of resource identification, rich knowledge is needed, and the source of this knowledge is entrepreneurial learning. Through entrepreneurial learning, entrepreneurs will transform their entrepreneurial knowledge into their abilities, improve their resource identification ability, and lay a good foundation for the resource integration of future entrepreneurial activities.The theoretical framework of this study is based on upper echelons theory and the concepts of Internet Embedding, Resource Identification, and Entrepreneurial Learning. During the research process, internet embedding was divided into three dimensions: connect degree, matching degree, and sense of sacrifice. The closer the connection between individuals and the internet, the higher the degree of matching between the internet and individual needs, and the more objects individuals face from the internet, the deeper their degree of embedding. Based on this, this study proposes 10 hypotheses to explore the impact of

internet embedding on resource recognition and verify the mediating role of entrepreneurial learning.In empirical research, entrepreneurs from 170 companies in Shanghai were surveyed through online questionnaires. After eliminating invalid questionnaires, 151 valid questionnaires were obtained. This study used SPSS 27.0 statistical analysis software to further analyze the collected data. After conducting reliability analysis, factor analysis, correlation analysis, linear regression analysis, and hierarchical regression analysis on the obtained data, the validity of the 10 hypotheses proposed in this study was verified, confirming that internet embedding has a positive impact on entrepreneurial learning, entrepreneurial learning has a positive impact on resource identification, and entrepreneurial learning plays a complete mediating role between internet embedding and resource identification.

CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter introduces the research overview of this study. It includes eight parts: Background of the study, Problem Statement, Research Objectives, Research Questions, Scope of Study, Structure of Theory, and Definitions of Key Terms.

1.2 Background of the study

With the continuous development of the Internet and technological innovation, the continuous improvement of its industrial chain has had a significant impact on social production and lifestyle (Yuliana and Hidayat, 2019). More and more entrepreneurs are conducting entrepreneurial activities through the Internet. The rapid development of information technology and the Internet not only opens up new spaces for social entrepreneurship activities but also provides more effective means and convenient ways for entrepreneurs to carry out entrepreneurial activities (Wang, 2021). Many entrepreneurial behaviors have become inseparable from the Internet, manifested as entrepreneurs using the Internet as a channel for entrepreneurship and obtaining resources, information, and opportunities, or using the Internet for promotion and marketing (Mei et al., 2019). The Internet economy has brought colossal market demand, promoted the vigorous development of manufacturing and related industries, and provided new entrepreneurial opportunities for entrepreneurs. Relevant studies (Yu et al.,2024 ; Takemoto & Oe, 2021; Towers et al., 2020 ; Langley et al. , 2021) have shown that the Internet will impact the entrepreneurial activities of entrepreneurs, esp ecially in identifying entrepreneurial opportunities, which can provide entrepreneurs with knowledge reserves to identify resources (Li, 2019). Based on this foundation, this study seeks to delve into the dynamics of Internet Embededness, particularly focusing on its role

within the Chinese market, which has seen rapid digital transformation yet remains under explored in academic literature.

Internet embedding refers to the integration of internet-based resources, tools, and platforms into the daily activities of individuals and organizations. This integration facilitates enhanced communication, resource sharing, and access to a vast pool of information, which are critical components for entrepreneurial education and activities (McKenna & Bargh, 2000; Wellman et al., 2001). The significance of entrepreneurial education lies in its ability to equip entrepreneurs with the necessary skills, knowledge, and mindset to identify and exploit business opportunities effectively. Internet embedding plays a crucial role in this context by providing a dynamic and interactive learning environment where entrepreneurs can continuously update their knowledge base, engage with mentors and peers, and access real-time market data (Bargh & McKenna, 2004).

Entrepreneurial education is pivotal in fostering innovation and competitiveness among Small and Medium-sized Enterprises (SMEs) (Johannisson et al., 2018). SMEs, which form the backbone of many economies, particularly benefit from resource identification—the process of recognizing and acquiring the resources needed to exploit entrepreneurial opportunities (Sarasvathy, 2001). Resource identification is essential for SMEs as they often operate with limited resources and face significant challenges in accessing the financial, human, and informational capital necessary for growth and sustainability (Ferraris et al., 2020). Effective resource identification can lead to improved operational efficiency, innovation, and competitive advantage, ultimately contributing to the economic development of a region (Gorgievski & Stephan, 2016).

Despite the recognized importance of resource identification, there is a lack of comprehensive studies exploring the impact of Internet embedding on this process within

the context of entrepreneurial education for SMEs. The integration of internet-based tools can potentially enhance the ability of entrepreneurs to identify, evaluate, and utilize resources effectively, thus warranting significant attention to this area of research (Li et al., 2021; Turban et al., 2015).

1.2.1 The impact of resource identification on entrepreneurial practice

Entrepreneurship is a process full of uncertainty and extremely complex. It requires entrepreneurs to effectively identify opportunities in the environment, formulate corresponding development strategies based on their conditions, and respond to changes in the external environment promptly in the process of enterprise operation (Wang, 2020). Entrepreneurial ability includes the ability of entrepreneurs to identify, develop entrepreneurial opportunities and effectively integrate and allocate entrepreneurial resources (Ridley-Duff, 2019). The identification and acquisition of entrepreneurial resources not only determine whether entrepreneurs can successfully create new enterprises but also is one of the main factors affecting the performance of new enterprises.

Resource identification is very important for the survival and development of enterprises (Somjai, 2019). For start-ups, the premise of effective use of resources to gain competitive advantage is how to identify valuable resources for enterprises. In the process of development, it is difficult to identify new enterprises to obtain the required resources (Suwandi et al., 2020). Some scholars have studied the impact of entrepreneurial networks on resource identification (Xiao, 2020). It is believed that entrepreneurial networks promote enterprises' recognition of resources and find the causal relationship between entrepreneurial networks and the growth of new enterprises.

1.2.2 The impact of Internet embedding on entrepreneurship

The quick development and widespread appeal of the Internet, cloud computing, and big data have propelled us into the era of the digital economy. and have also had a significant impact on entrepreneurial practice (Patrick and Patrick, 2020). The People's Republic of China's 2022 Vision for 2035 and the Outline of the Fourteenth Five-Year Plan for the National Economic and Social Development of the People's Republic of China both make it very evident that the country must embrace the digital age, unleash the power of data elements, build a strong national network, and encourage the transformation of production. Businesses should take advantage of the current climate, implement creative problem-solving techniques, rationalize personnel management, completely develop the network economy, and enhance enterprise development (Li, 2021). As a result, China's development depends critically on the digital economy that is integrated into the Internet environment (Chun-Yu et al., 2018). China's economic development will gain new impetus and cultivate new advantages thanks to the digital economy, giving it an advantage in global competitiveness.

The Internet has brought new opportunities to entrepreneurs (Salamatov et al., 2019). The research shows that the application of the Internet will have an impact on the entrepreneurial practice of start-ups and entrepreneurial teams, which is manifested in the identification and acquisition of entrepreneurial networks, social capital, and resources. The identification and acquisition of resources is the key to the growth of new ventures. Entrepreneurs must solve the problem of identification and acquisition of resources in the process of entrepreneurship (Xiao et al., 2010).

New enterprises are in a complex and changing environment and need to continue to learn and improve their ability to identify resources. The continuous learning behavior of new enterprises is especially conducive to obtaining key information resources,

and then identifying and utilizing various opportunities (Teece et al., 1997). The Internet has increased the number of information sources available, hastened the rate at which information is disseminated, and thus, in part, encouraged the spread and diffusion of knowledge. Tsai (2001) found in his research that the circulation of knowledge can provide more opportunities for members to learn and cooperate, and stimulate the creation of knowledge and the enhancement of innovation ability. Entrepreneurs and their teams can obtain more industry information, international trends, relevant data, and failure or success experiences through the Internet. From this perspective, the Internet provides more information for entrepreneurial teams to learn and reference, and thus promotes their entrepreneurial learning process (Hermanson et al., 2018). The Internet provides entrepreneurs and their teams with a platform for free exchange and knowledge sharing (Wu and Liang, 2018).

The concept of "Internet embeddedness" was introduced and verified with the intermediary role of social capital between Internet embeddedness and entrepreneurial opportunity identification (Ji, 2023). The Internet not only enriches the channels for obtaining information, improves the speed of information dissemination, and promotes the flow of knowledge, but also provides a platform for entrepreneurs to communicate and share resources, making it faster and more convenient for entrepreneurs to obtain relevant entrepreneurial information and knowledge, thus effectively identifying and utilizing the resources required for entrepreneurial activities (Ridley-Duff, 2018). Some scholars believe that the flow of knowledge provides members with more opportunities for mutual learning and cooperation, stimulating the creation of knowledge and the enhancement of innovation capabilities (Tsai, 2001).With the platform of the Internet, entrepreneurs can obtain richer entrepreneurial information, cutting-edge trends in industry development, failure or success experiences, etc (Zeyu and Zichun, 2019). Therefore, the Internet provides entrepreneurs with more and more

learning and reference materials, a platform for communication and sharing, and plays a positive role in their entrepreneurial learning activities, thereby providing knowledge reserves for resource identification(Jia，2022).

Internet embedding significantly impacts entrepreneurial learning by facilitating access to a wide range of educational resources and enabling continuous learning (Hallen et al., 2014; Rubenstein et al., 2019). According to McKenna and Bargh (2000), the Internet provides an unprecedented platform for interactive learning, where entrepreneurs can engage in real-time discussions, attend virtual seminars, and collaborate on projects with peers from around the world. This connectivity not only broadens their knowledge base but also enhances their practical skills through exposure to diverse entrepreneurial practices (Chakravarty et al., 2018). Studies have shown that entrepreneurs who leverage online learning platforms tend to be more innovative and better equipped to adapt to market changes (Ozuem et al., 2021). Moreover, Internet embedding supports personalized learning experiences, allowing entrepreneurs to tailor their educational journeys according to their specific needs and pace, thus making the learning process more effective (Guinard et al., 2018).

1.2.3 The impact of entrepreneurial learning on entrepreneurial practice

Entrepreneurship learning plays an important role in the resource identification activities of enterprises. The process of resource identification in enterprises (Sukerti et al., 2019). Extensive and rich knowledge is needed in China, and entrepreneurial learning can help one attain this. The process of turning entrepreneurial experience into entrepreneurial knowledge is known as "entrepreneurship learning" (Kolb, 1984). In essence, entrepreneurship is a process of learning. According to Minniti and Bygrave (2001), entrepreneurship education can significantly increase the likelihood of an entrepreneur's success by assisting them in

seeing business opportunities, pursuing the resources required for entrepreneurship, and developing the fundamental skills necessary to recognize important entrepreneurial resources. Entrepreneurs often face many uncertainties and drastic market changes in the process of entrepreneurship, and their knowledge is always unable to fully cope with challenges. They need to constantly update and learn (Neeson, 2022).Due to the crucial role played by entrepreneurs in responding to environmental changes and achieving entrepreneurial achievements and goals, entrepreneurial learning emerges as a pivotal factor. Research highlights the adaptability and innovation required by entrepreneurs in dynamic environments (Szerb, 2003), the human agency and learning capacity needed to respond to climate challenges (O'Brien & Sygna, 2013), and the motivational factors driving entrepreneurs to tackle environmental issues (Kaesehage, Leyshon, & Ferns, 2019). In the process of resource identification, enterprises need extensive and rich knowledge, which can be obtained through entrepreneurial learning. People can understand and seize various business opportunities by selecting experiences. Entrepreneurs who start their first venture are likely to achieve greatersuccess in their second or third venture (Theodor et al, 2021).

1.3 Problem Statement

In the decades following China's economic takeoff, a significant number of entrepreneurs have emerged. Despite this growth, identifying entrepreneurial resources has become increasingly challenging. More than 76% of entrepreneurs believe that identifying entrepreneurial resources is difficult (XiaoChun & Xing, 2023). This difficulty arises from several key factors, which have substantial implications for the success and sustainability of new ventures.

Firstly, entrepreneurs often lack a comprehensive understanding and awareness of the resources available to them. This includes financial resources, human resources,

market channels, and technological support (Aarstad et al., 2016). A report by the China Association of Small and Medium Enterprises (2021) highlights that nearly 60% of SMEs cite access to finance as their biggest challenge, demonstrating a critical gap in resource identification and acquisition.

Secondly, there is a significant issue of information asymmetry. Entrepreneurs frequently struggle to obtain sufficient information about potential investors, suitable talents, and advanced technologies in their industry (Jogaratnam, 2017). For instance, a survey by PwC (2020) revealed that 70% of startups in China have difficulty in connecting with the right investors due to inadequate information channels.

Moreover, entrepreneurs face severe time and energy constraints. The high-risk and high-pressure nature of entrepreneurship requires them to juggle multiple tasks simultaneously, such as market research, business plan development, and team building (Zahra, 2021). According to a study by the Global Entrepreneurship Monitor (GEM) (2022), over 65% of entrepreneurs report that time constraints significantly hinder their ability to identify and secure necessary resources.

Additionally, the lack of personal experience and knowledge in resource identification compounds these challenges. Many entrepreneurs, particularly first-time founders, lack the necessary experience to navigate the complex landscape of resource identification effectively (Ferraris et al., 2020). This gap in experience often results in missed opportunities and suboptimal decision-making.

Finally, the rapidly changing market environment adds another layer of complexity. Entrepreneurs must constantly adapt to new trends and technologies, but without accurate and timely market information, they struggle to position their products or services effectively. A study by McKinsey & Company (2021) found that 55% of SMEs in China

failed to adapt quickly enough to market changes, leading to strategic missteps and resource misallocation.

Entrepreneurs also realize that entrepreneurial learning is a challenging task. Entrepreneurship learning requires entrepreneurs to actively acquire knowledge and experience to identify better and utilize entrepreneurial resources (Greeno, 1996). However, the difficulty and challenge of entrepreneurial learning have not been fully studied (Miranda et al., 2020). The difficulty of entrepreneurial learning is influenced by various factors, including personal characteristics, educational background, and experience accumulation of entrepreneurs (Hassan et al., 2020). At the same time, entrepreneurial learning can be carried out in different ways, such as through practical experience learning, social network learning, education and training learning, etc. (Zheng et al., 2017). However, we are currently unclear about the specific mechanisms by which these influencing factors and methods affect the difficulty and challenge of entrepreneurial learning.Empirical research in entrepreneurial learning is relatively insufficient (Jiao et al., 2010). Although some studies have explored the relationship between entrepreneurial learning and resource identification through case analysis, survey questionnaires, and other methods, more empirical research is needed to verify and support these theoretical viewpoints (Ahmed et al., 2020). Empirical research can gain a deeper understanding of the role of entrepreneurial learning in resource identification by tracking the learning process of entrepreneurs and collecting their experiences in addressing entrepreneurial learning challenges.

The influencing factors and entrepreneurial learning methods on resource identification have not been fully explored (Markowska and Wiklund, 2020). Resource identification refers to entrepreneurs discovering and identifying resources that can be used for entrepreneurial activities through observation and cognition of the external

environment (Wang and Chung, 2014). Entrepreneurial learning may affect resource identification by increasing the knowledge reserve of entrepreneurs, expanding cognitive boundaries, and improving information processing abilities (Cha, 2023). However, we have not yet established a systematic theoretical framework to explain how entrepreneurial learning addresses these difficulties and affects the resource identification process (Muhammad, 2019).

1.4 Research Objectives

The purpose of this study is to study the possible impact of Internet embeddedness on the resource identification of entrepreneurial teams through a process model, and explore the impact of entrepreneurial learning on the resource identification ability of entrepreneurs, and then verify the hypothesis put forward in This thesis, that is, entrepreneurial learning plays an intermediary role between Internet embeddedness and resource identification. Therefore, the research objectives of this study are as follows:

(a) To examine the impact of Internet embedding on resource identification.

(b) To examine the impact of internet embedding on entrepreneurial learning

(c) To examine the impact of entrepreneurial learning on resource identification.

(d) To examine the role of entrepreneurial learning in the relationship between Internet embedding and entrepreneurial resource identification.

1.5 Research Questions

The basic research questions of this study are as follows:

(a) What is the impact of Internet embedding on resource identification?

(b)What is the impact of Internet embedding on entrepreneurial learning?

(c) What is the impact of entrepreneurial learning on resource identification?

(d) Does entrepreneurial learning mediate the relationship between Internet embedding and resource identification?

1.6 Scope of Study

This study aims to explore the impact of internet embedding on entrepreneurs identifying entrepreneurial resources during the entrepreneurial process, and to explore the mediating role of entrepreneurial learning. Our research focuses on entrepreneurs and startups in the Shanghai region of China. The independent variables of this study are the three dimensions of internet embedding, including connect degree, matching degree, and sense of sacrifice (Venkataraman, 2019). In the research process, this study first investigated the influence of antecedents of resource identification, namely the three dimensions of internet embedding, including connect degree, matching degree, and sense of sacrifice, on the identification of entrepreneurial resources. Next, we further validated the mediating role of entrepreneurial learning in the impact of internet embedding on entrepreneurial resource identification.

As mentioned earlier, the focus of this study is on new start-up companies in the Shanghai region. New startups in the Shanghai region are considered the most suitable for conducting this study for two reasons. Firstly, the Shanghai region is a major contributor to China's economic growth (Liu et al., 2021). The impact of internet embedding on the identification of entrepreneurial resources is the second research topic of this project (Awan et al., 2021). According to the definition of a start-up enterprise, it is established for no more than 5 years (60 months); Relatively small in scale, with no more than 200 employees when accepting investments; The total assets and annual sales revenue shall not exceed CNY 30 million (Ji et al., 2022). Recent years have seen the rapid growth of internet technology, which has resulted in a quick establishment period for new businesses

(Sukumar et al., 2021). In addition, new startups have just gone through or are currently in the early stages of entrepreneurship, new startups have just experienced the identification of entrepreneurial resources or more necessary to identify entrepreneurial resources (Xiong, 2022). The interviewees need to understand the resource identification process in the process of enterprise entrepreneurship, so the interviewees in this study include company bosses, executives, and middle-level managers (Hakovirta et al., 2022). We have obtained the latest relevant data using the "AiQicha" website. The sampling criteria are based on the inclusive requirements of the study, which includes startups with employees not more than 200 people.

1.7 Research Significance

1.7.1 Theoretical significance

The role of internet embedding to resource identification by entrepreneurs during the entrepreneurial process was theoretically assessed by this study. confirmed that entrepreneurial learning functions as a mediator between the identification of entrepreneurial resources and internet embedding. This study fills a gap in the theory of the impact of Internet embeddings on resource identification. It enriches the relevant theoretical system of internet embedding and resource identification. This study draws on the concept of "embeddedness" in sociology and utilizes relevant research methods on "work embeddedness" . The concept of internet embedding was used to describe and study the impact of the development of internet technology on entrepreneurs' information acquisition, resource identification and overall ability improvement (Decha et al., 2017). At different stages of enterprise growth, the types or importance of resources required vary, and startups also have certain characteristics in terms of resource needs and their own resources. Identifying the growth stages and resource demand characteristics of new startups is a prerequisite for resource

development and utilization (Xian, 2019). New startups,like other enterprises, should pay attention to the heterogeneity and illiquidity of resources to bring competitive advantages to the enterprise (Jing et al., 2018). From the four attributes of heterogeneous resources, namely valuable, scarce, immutable, and irreplaceable, to measure the human, social, financial, material, technological, and organizational resources of enterprises, it can be found that some resources cannot become the core resources of enterprises (Teman, 2018). Therefore, for entrepreneurs, the ability to identify resources is crucial. This study used upper echelons theory to study the ability of entrepreneurs to identify entrepreneurial resources during the entrepreneurial process. In the process of resource identification, rich knowledge is required, and the source of this knowledge is entrepreneurial learning (Xiong and Gao, 2020). This study is also expected to enrich the existing literature on identifying entrepreneurial resources for entrepreneurs in Shanghai. This study aims to confirm the mediation role of entrepreneurial learning and investigate how internet embedding affects the identification of entrepreneurial resources.

1.7.2 Practical significance

This research analyzes also providing guidance and inspiration for entrepreneurs and entrepreneurial policymakers. From a micro perspective, although there are more opportunities to identify entrepreneurial opportunities on the internet, individuals lack relevant experience or business training, making it difficult to directly identify entrepreneurial opportunities and seize better opportunities. Conducting research on identifying entrepreneurial resources can enable practitioners to truly learn from relevant cases. Furthermore, the pertinent findings of this study (Rahimnia et al., 2019) can teach entrepreneurs about the influence of internet embedding on the identification of entrepreneurial resources and the function of entrepreneurial learning. This will enable entrepreneurs to learn from it, improve their ability to identify entrepreneurial resources and increase the success rate of entrepreneurship.

From the perspective of macro entrepreneurship policy formulation, with the promotion of economic system reform and the strong motivation of the government to change the economic development mode, the government has introduced more policies to encourage mass entrepreneurship (Stewart and Wiener, 2021). Strengthening research on identifying entrepreneurial resources for entrepreneurs can directly serve as a policy reference for the government.

1.8 Structure of Thesis

Chapter 1 introduces the research background of this study, elaborates on the problem, elaborates on the research purpose, and clarifies the research question. Explain the scope of this study, clarify the significance of this study, and introduce the structure of this article.

Chapter 2 mainly focuses on the organization and review of domestic and foreign literature, as well as the construction of theoretical models. We have reviewed the concepts and theories related to internet embedding, resource identification, and entrepreneurial learning involved in this study. Based on relevant theories, explore the relationship between internet embedding and resource recognition, the relationship between the three subdimensions of internet embedding (connect degree, matching degree and sacrifice) and resource recognition, and the mediating role of entrepreneurial learning in the relationship between internet embedding and resource recognition. Build relevant theoretical models and propose research hypotheses based on relevant theories.

Chapter 3 is research methodology. This includes research design, determination of sample size and total volume, pre-testing, measurement scale, questionnaire design, and other related content. Based on the research objectives, drawing on existing theoretical

achievements, and combining them with research needs, a research design was carried out, and a survey questionnaire for this study was designed and compiled.

Chapter 4 is analysis and results. After screening and removing any invalid questions, the data is processed and analyzed using statistical analysis software (SPSS 27.0). Check the validity of the questionnaire and other variables; that is, examine the measurement questionnaire's validity and reliability as well as the reliability of the questionnaire's primary and secondary variables. Analyze relevant data buried in the internet using factor analysis, then evaluate the study's hypotheses using hierarchical regression and correlation analysis.

Chapter 5 is a discussion on the conclusion. Analysis and discussion of experimental results. After conducting empirical analysis on the data, analyze and summarize the hypothesis test results, discuss the results and draw conclusions, point out the shortcomings of this study, and propose research prospects.

1.9 Definitions of Key Terms

1.9.1 Internet embedding

Internet embedding refers to the closeness of the connection between the Internet and individuals, reflecting the frequent contact between individuals and Internet (Yu et al., 2014).

1.9.2 Entrepreneurship resources

Entrepreneurship resources are the particular assets that new businesses require in order to create value. These assets can be both tangible and intangible (Boudreaux et al., 2017).

1.9.3 Resource identification

Resource identification refers to the process of discovering, distinguishing, defining and determining resources. Only when enterprises identify specific resources can they find this strategic opportunity, and then obtain resources, seize opportunities, and improve the success rate of entrepreneurship (Ravnborg & Westermann, 2002).

1.9.4 Connect degree

The connect degree is a formal or informal dependency relationship between individuals and organizations or others (Yu et al., 2014).

1.9.5 Matching degree

Matching degree refers to the psychological feeling that they can easily integrate into their working environment and feel comfortable (Yu et al., 2014).

1.9.6 Sense of sacrifice

Sense of sacrifice refers to the loss of material, psychological, financial, and other benefits of entrepreneurs and start-ups due to leaving the Internet (Yu et al., 2014).

1.9.7 Entrepreneurship learning

Entrepreneurial learning refers to learning from various accumulated experiences to improve their knowledge stock (Lang-Ni et al., 2017).

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

As more people and organizations use the Internet to communicate with the outside world, there will be a rise in the level of close communication, information sharing, and social network integration between members of these communities. This chapter introduces the relevant research results of Internet embedding, resource identification, and entrepreneurial learning, providing theoretical support for the full study.

2.2 Relevant research on Internet Embedding

2.2.1 Embedding

The concept of embeddedness originates from social networks, and economist Polany first proposed the concept of "embeddedness" and applied it to the field of economics. In his research on economic history, he found that some noneconomic factors have a significant impact on the economy, including government, religion, social form, culture, etc. The fact that "the human economy is embedded and entangled in economic and noneconomic systems" was another thing he brought up (Wang, 2021). In the concept of 'embeddedness', Polany aims to illustrate the impact of noninstitutional and noneconomic factors on the human economy. After Polany put forward this concept, it did not attract wide attention. Until the mid- 1980s, Granovetter, the representative of the American New economic sociology, introduced Polany's concept of embeddedness into the field of sociology, expanded the scope of economic activities into the interpersonal network, and became a basic concept of the current American New Economic sociology (Graf et al., 2018). According to Granovetter, social interactions have a considerable impact on an individual's economic conduct during the course of humanity's lengthy and progressive history, and one could

argue that social relationships are fundamental to economic behavior. According to Granovetter, social embeddedness has two dimensions: relational embeddedness and structural embeddedness, which are based on the variations in the quantity, intensity, and mutual benefit of contacts between the two parties. An official trading relationship-based network is referred to as structural embedding. Relational embedding emphasizes the trust relationship between trading members (Huang, 2020). In the embeddedness research after Granovetter, Alexander Roberts, a professor of sociology at Princeton University in the United States, redefined the concepts of embeddedness and embeddedness, enhancing the flexibility of this concept (Jia, 2022). He believed that embeddedness can be rational, structural (relational), or human, and embeddedness can refer to the economic, social, and cultural structure of society, Thus, this concept has the potential for theoretical transfer.

The concept of embeddedness is not only applicable to the economic field, but also to other fields of human social activities, so it has a certain degree of universality (Li, 2019). The embedded perspective holds that individual economic behavior is influenced by various social norms. We can view an organization as a social network composed of individuals (Wang, 2020). If all economic behaviors are embedded in the social network, the social network becomes a bridge for communication between individuals and organizations. Human economic and social activities are embedded in social relations. Human beings, as practical subjects, also have specific social statuses and are in the social structure, that is, social actors are embedded in the social structure.

2.2.2 Internet embedding

In today's rapidly developing network information technology landscape, the Internet serves as a pivotal tool for communication and exchange, providing more

convenient ways for people to connect. The social network research school, represented by Granovetter (1985) and more recently by Thornton and his colleagues (2021), focuses on individual relationship patterns in networks and how interpersonal communication, communication channels, and related networks affect individual behavior (Thornton et al., 2021).

Dong's (2015) study delineates relationships between individuals and organizations into strong and weak ties, highlighting differences in interaction frequency, intimacy, and reciprocity (Dong, 2015). Research indicates that social resources are embedded within social networks, requiring resource acquirers to access these resources through their network connections, with weak ties playing a particularly effective role in resource identification(McKenna et al., 2002).

Social resource theory posits that individuals with higher social status have greater access to resources, and their more abundant social networks increase their likelihood of resource acquisition (Susilana, 2019). Scholars have also discovered that the Internet provides a new mode of learning, enabling the discovery of a large amount of information and learning materials, thus making research and achievements more scientifically grounded (Michael, 2004). Bargh and McKenna (2002) explored the Internet from the perspective of social life, concluding that it enhances relationships and offers a more open, free, and convenient communication platform (Bargh & McKenna, 2002).

Aldrich and Zimmer (1987) highlighted that different entrepreneurial networks impact entrepreneurial outcomes, with Jia et al. (2022) agreeing on the value of social networks in information exchange, promoting resource and opportunity identification (Aldrich & Zimmer, 1987); (Jia, 2022). Li et al. (2019) verified the significant role of social networks in entrepreneurship, noting that entrepreneurs use these networks to connect opportunities with resources (Li, 2019).

The rapid development of information technology has made communication more convenient, with increasing demand for Internet functionalities among individuals and businesses (Feher & Towell, 1997). The Internet's widespread application in business is transforming business models, with companies expanding through online platforms (Stephanie, 2014). Fanou's research on Internet penetration in Africa illustrates the Internet's impact on lifestyles and organizational communication(Fanou, 2017).

Blazevic et al. (2014) argue that the Internet provides a more expansive platform for communication, altering social interactions and enhancing information acquisition and social network integration (Blazevic et al., 2014). Yu Hanfei (2014) introduced the term 'internet embedding', likening it to social networks in its ability to help entrepreneurs gather resource information and build social capital, thereby facilitating opportunity identification (Yu, 2014). Fang (2020) further refined this concept, proposing that internet embedding consists of three dimensions: connection degree, matching degree, and a sense of sacrifice (Fang, 2020).

In summary, internet embedding refers to the social, psychological, and economic ties individuals develop with the internet. Higher degrees of embedding result in stronger connections and greater integration into the digital environment, mirroring the benefits and dynamics seen in traditional social networks.

2.2.2(a) Connect Degree

In the information age, personal learning, work, and life are closely connected to the Internet, which has become an integral part of daily life. The Internet provides a platform that enables individuals to strengthen their connections with familiar individuals and make new friends, thereby expanding their social networks (Xie, 2020). The connect degree refers to the social, psychological, and financial connections individuals and groups

establish in the virtual environment of the Internet. Entrepreneurs engage in various activities through Internet platforms, such as promotion, customer communication, and business networking, reflecting their level of embeddedness in the Internet. Higher levels of connect degree indicate more frequent and meaningful interactions with the Internet, facilitating information and knowledge exchange among entrepreneurs (Fang, 2022).

The frequency of Internet use among entrepreneurs can measure the degree of connect degree embeddedness. Frequent Internet usage correlates with higher levels of embeddedness, exposing entrepreneurs to more online data and increasing their chances of identifying entrepreneurial opportunities (Liu et al., 2020). Dimensions of Internet embedding include usage frequency, duration, and social networking activities. Greater exposure to the Internet enhances the likelihood of acquiring entrepreneurial opportunities and establishing robust social networks (We & Jian-Hua, 2019). Consequently, higher levels of Internet embedding lead to more effective communication with partners and quicker access to industry information, promoting the identification of entrepreneurial opportunities.

Additionally, McKenna and Bargh (2000) highlight that the Internet facilitates the formation and maintenance of weak ties, which are instrumental in accessing novel information and resources. Granovetter's (1973) theory on the strength of weak ties further supports the idea that these connections can significantly aid in identifying unique resources and opportunities that are not available through strong ties alone. The ability to maintain a broad network of weak ties via the Internet thus enhances the connect degree and its impact on entrepreneurial activities.

2.2.2(b) Matching degree

The matching degree of Internet embedding reflects an individual's ability to adapt to the Internet environment. Entrepreneurs use Internet platforms to seek and gather

information and knowledge pertinent to their activities, demonstrating the matching process of their needs with the available online resources. A higher matching degree indicates that entrepreneurs can find like-minded individuals, relevant information, and data more easily, facilitating knowledge and experience exchange (Ozuem et al., 2021). This adaptability enhances the flexibility and efficiency of using Internet technologies, expanding social networks and enabling reliable information and tacit knowledge sharing among network members.

The opportunity matching degree of Internet embedding pertains to how well personal information and knowledge from the network meet individual needs. Entrepreneurs who find relevant information and like-minded contacts on the Internet are more likely to exchange and share knowledge, thus identifying and capitalizing on entrepreneurial opportunities (Li et al., 2020). A strong matching degree implies that the Internet environment effectively supports entrepreneurs in meeting their varied informational and social needs, thereby promoting the identification of entrepreneurial opportunities.

Furthermore, research by Turban et al. (2015) emphasizes that the effectiveness of e-commerce platforms in matching consumer needs with products can be paralleled in how entrepreneurs match their needs with resources available online. This adaptability is crucial for maximizing the benefits of Internet use in entrepreneurial ventures. The study suggests that platforms which better match user needs enhance user satisfaction and engagement, thereby increasing the likelihood of successful resource identification.

2.2.2(c) Sense of Sacrifice

Sense of sacrifice refers to the loss of material, psychological, financial, and other benefits when disconnecting from the Internet. Entrepreneurs who leave the Internet experience a sense of disconnection from society, loss of spiritual support, higher costs to

obtain resources, and fewer opportunities for knowledge exchange and experience sharing (Chiu et al., 2019). A higher sense of sacrifice indicates greater reliance on the Internet, underscoring its role in providing effective information and resources for entrepreneurial activities.

When entrepreneurs feel a significant sense of loss upon leaving the Internet, it reflects their high dependence on it for business activities, emotional sustenance, and access to resources. This dependence underscores the critical role of the Internet in facilitating entrepreneurial activities. A higher sense of sacrifice suggests stronger personal and professional ties to the Internet, where leaving it would mean losing access to valuable information, knowledge, and resources necessary for entrepreneurial success (Ogden, 2022).

Moreover, Wellman et al. (2001) discuss the concept of "networked individualism," which emphasizes the personal networks formed through Internet use. These networks provide substantial social capital, and losing access to these networks can result in significant social and professional costs. The sense of sacrifice is thus closely linked to the perceived value of these online networks in supporting entrepreneurial ventures.

2.3 Relevant research on resource identification

2.3.1 Resource-based theory

In the 1990s, resource theory aroused the wide interest of scholars. Timon (2008) constructed the entrepreneurial process framework based on the three dimensions of opportunity, resources, and team. Melmiès (2023) believe that the exclusive resources of enterprises are an important source of high profits and competitive advantages of enterprises. Wernerfelt (1984) believes that the core strength of enterprises comes from internal resources. Barney (1986) believes that the development strategy of enterprises and

the cost of strategy implementation jointly affect the market performance and development potential of enterprises .

Dierickx and Cool (1989) believed that accurate resource assessment can enable enterprises to successfully avoid risks and provide opportunities for long-term development. Barney (1991) believed that the advantageous resources that determine the development prospects of enterprises, which originate from the internal of enterprises, are valuable, scarce, difficult to imitate, and irreplaceable, and are the key components for enterprises to obtain core competitiveness .

Based on the resource-based theory, scholars have conducted extensive research on resource classification. Resources are usually divided into human resources, social resources, financial resources, material resources, technical and organizational resources, and social capital (Ashley, 2018). Financial, material, human, technological, reputational, and organizational resources are the main categories into which resources can be divided (Hao, 2018). Barney (1991) suggests that resources should be divided into financial resources, material resources, human resources, and organizational resources. Galunic et al. (1998) argue that resources are divided into two types: tangible resources and knowledge-based resources. Brush et al. (2001) introduced the classification concept of Utilitarian resources and Instantantal resources.

2.3.2 Resource characteristics

At different stages of enterprise growth, the types or importance of resources required vary, and startups also have certain characteristics in terms of resource needs and their own resources. The resource-based view clarifies that enterprises should pay attention to the heterogeneity and illiquidity of resources to bring competitive advantages to enterprises (Kassean, 2015). Enterprises can achieve business strategies that are not imitated by other enterprises through the heterogeneity