

The Impact of Resources of China's SMEs on Their Internationalization Performance

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Abstract—According to Resource-based View, this paper is based on three kinds of resources of small and medium-sized enterprises (SMEs): entrepreneurial ability, human resources and social network. Through the structural equation model analysis of the data collected from the questionnaires, it is concluded that all above three aspects have a positive impact on the internationalization performance of SMEs, and the most significant one is relationship network. Among them, the management ability and learning ability of entrepreneurs, the professional knowledge and skills of employees, and the relationship between SMEs and suppliers are the most significant factors in these three aspects respectively. Based on the results of the empirical analysis, the corresponding recommendations are finally put forward.

Keywords—SMEs, internationalization, resources of enterprises

I. INTRODUCTION

SMEs are an important part of China's economy. Till the end of 2016, there were more than 40 million SMEs in China, accounting for more than 90% of the total number of enterprises in China, undertaking 80% of the employment of urban residents in China, and 50% of the tax revenue. In addition, SMEs also play an important role in new inventions and patents as well as in the development of new products [1].

In order to comply with the trend of world economic development, SMEs are actively participating in globalization. The implementation of "Belt & Road" initiative also promotes the internationalization of SMEs. However, China's SMEs still face many difficulties due to their small scale, the large number of similar enterprises, and the lack of internationalization experience in the process of participating in globalization. There is an urgent need for scientific theoretical guidance. Whereas, there is insufficient research on the internationalization of SMEs, especially those in developing countries. Therefore, theoretical

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research on factors affecting the internationalization of SMEs is particularly meaningful. This paper explores the impact of enterprise resources on the internationalization of SMEs in China and the ways to improve the internationalization performance of them from the perspective of enterprise resources, and promote the internationalization of SMEs in China.

II. LITERATURE REVIEW AND HYPOTHESES

Penrose (1959) pointed out that an enterprise was not only an administrative organization but a collection of resources. She believed that the internal resources of the enterprise were the driving force for the development of it and also the source of the its sustainable competitive advantage [2].

Based on Penrose's point of view, Wernerfelt (1984) proposed the Resource-based View (RBV) of the enterprise, which pointed out that an enterprise was a collection of various resources and the resources owned by the enterprise were different for various reasons. The competitive advantage of the enterprise stemmed from the unique resources of it [3]. RBV is used to determine the strategic resources with the potential to deliver comparative advantage to a firm. These resources can be exploited by the firm in order to achieve sustainable competitive advantage.

As for the specific resource which can contribute to competitive advantage of an enterprise, there are several opinions. Some scholars believe that the entrepreneur's own ability plays an important role in the operation and development of SMEs, and thus has a positive effect on the internationalization of SMEs [4-7]. Some hold the idea that human resources have a positive effect on the internationalization of SMEs, like Qi, Xu, Shi [8-10]. While Zheng conducted an empirical analysis of 146 SMEs in Guangzhou through questionnaire survey, concluded that the social network of enterprises had a significant role in promoting the internationalization performance of enterprises [11]. Similar views have been proposed by Chen et al. and Zhang [12,13].

In summary, this paper argues that human resources, as the basis for the operation of SMEs, is not only one of the important sources influencing SMEs' competitive advantage but also an important factor in determining the competitive advantage of SMEs. However, whether SMEs can

successfully internationalized and the performance of its internationalization is closely related to the ability and experience of entrepreneurs. Therefore, entrepreneurial ability is also one of the resources for SMEs to have competitive advantage. In addition, the social network of SMEs is also a key factor affecting its internationalization. Therefore, this paper mainly discusses the impact of SMEs' resources on its internationalization performance from three aspects: entrepreneurial ability, human resources and social network

A. Entrepreneurial Ability and Internationalization Performance of SMEs

Entrepreneurs are the founders, controllers and regulators of SMEs' internationalization strategy. A strategy of internationalization that matches the actual situation of SMEs is more conducive to the realization of SMEs' internationalization goals. To develop such a strategy, entrepreneurs are required to have effective strategic capabilities and ability to utilize relevant information and resource. Therefore, entrepreneurial ability is crucial to the internationalization and development of SMEs.

Hypothesis 1: Entrepreneurial ability has a positive impact on the internationalization performance of SMEs

B. Human Resource and Internationalization Performance of SMEs

Human resource is not only the basis for the long-term development of SMEs, but also one of the important sources to acquire and keep their competitive advantage. Employees with professional knowledge and skills can work with higher quality and efficiency, which help improve the performance of SMEs, and become a competitive advantage for SMEs in the process of internationalization. Creative employees can develop new products or innovative ideas which are helpful for internationalization of SMEs.

Hypothesis 2: Human resources has a positive impact on the internationalization performance of SMEs.

C. Social Network and Internationalization Performance of SMEs

Close formal network enables business partners to learn from each other and promote knowledge transfer and technology access to achieve technological advancement to gain international competitive advantages. They can also provide SMEs with information, resources and new business partners that are conducive to internationalization. The positive communication and interaction between SMEs and government agencies can enable SMEs to obtain tax breaks and low-interest loans, which can reduce the cost of internationalization of SMEs so that they can use limited funds for international business. In addition, government agencies can provide SMEs with information that can be conducive to their internationalization to make up for the shortcomings of lacking information; good relationships between SMEs and financial institutions can make SMEs

financing for international activities in a faster and lower-cost way; the close ties between SMEs and industry associations can enable them to obtain more information, meet new business partners, and bring effective resources and information to the internationalization of SMEs which is conducive to its internationalization.

Hypothesis 3: Social network has a positive impact on the internationalization performance of SMEs.

III. QUESTIONNAIRE AND EMPIRICAL ANALYSIS

According to the research objective in this paper, by reading a large number of relevant literature, combined with similar research scales adopted by other scholars, a preliminary questionnaire was obtained. A total of 400 questionnaires were distributed and 253 were collected, of which 125 were valid. An empirical analysis was performed based on the data of the valid questionnaire.

A. Reliability Analysis

SPSS22.0 software is used to study the intrinsic reliability of each scale in the questionnaire. Here the Cronbach α reliability coefficient is a measure for internal consistency. When the Cronbach α reliability coefficient values 0.7 - 0.9, the inherent reliability is considered to be high or acceptable. When it is greater than or equal to 0.9, it indicates that the inherent reliability of this scale is very high.

TABLE I. RESULT OF RELIABILITY ANALYSIS

	Cronbach α reliability coefficient
Entrepreneurial Ability	0.722
Human Resources	0.748
Relationship Network	0.740
Internationalization Performance	0.716

As shown in Table 1, the reliability analysis of the four scales: entrepreneurial ability, human resources, social network and internationalization performance shows that the Cronbach α reliability coefficient is greater than 0.7, indicating that the scale meets the acceptable standards. The internal reliability is high. In addition, from the analysis results, it is known that the Cronbach α reliability coefficient after deleting any one of the scales is lower than the original coefficient, and thus it is not necessary to delete any one.

B. Validity Analysis

In this section, the SPSS22.0 software is used to determine the structural validity of the scale based on the Bartlett test of sphericity and the KMO test. It is generally believed that when the approximate chi-square value of the Bartlett test of sphericity is significant and the KMO value is greater than 0.7, the structural validity of the scale is good.

As can be seen from Table 2, the KMO values of the

four scales: entrepreneurial ability, human resources, relationship network and internationalization performance are all greater than 0.7, in line with KMO metrics. The approximation of the approximate chi-square value of the Bartlett test of sphericity is 0, indicating that the approximate chi-square value is significant. The structural validity of the scale is good, that is, this sample meets the requirements of exploratory factor analysis.

TABLE II. RESULT OF VALIDITY ANALYSIS

	KMO Value	Approximation of the Approximate Chi-square Value
Entrepreneurial Ability	0.745	0.000
Human Resources	0.778	0.000
Relationship Network	0.740	0.000
Internationalization Performance	0.715	0.000

C. Structural Equation Model

According to the results of the previous section, the data of this questionnaire has good reliability and structural validity, thus satisfying the preconditions for establishing a structural equation model. On this basis, a structural equation model is established by using AMOS 21.0 software, and the experiment and analysis are carried out.

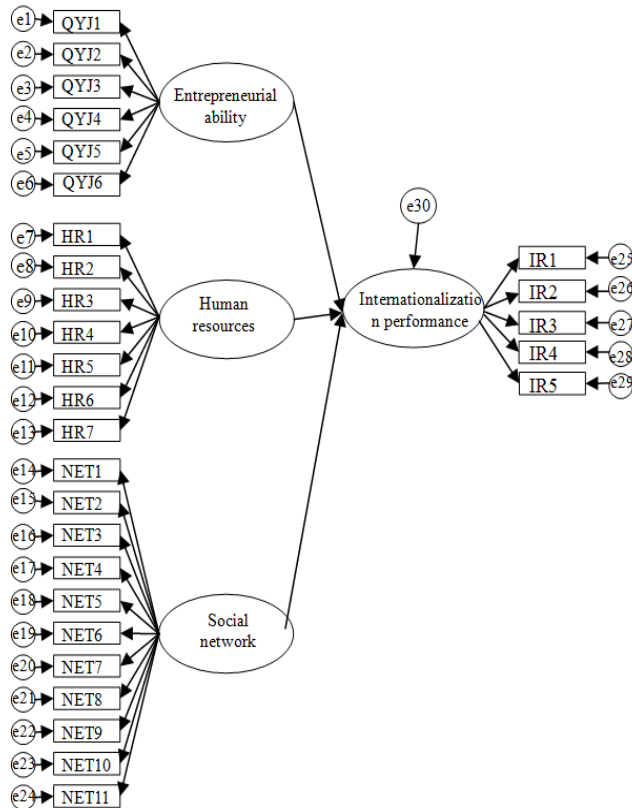


Fig. 1. Original model M1

1) Establishment of Structural Equation Model

According to the summary and related hypotheses in Chapters 2 and 3, the original model M1 is established, as shown in Fig. 1. Model M1 has four subliminal variables: entrepreneurial ability, human resources, social network and internationalization performance. Among them, entrepreneurial ability, human resources and relationship network are independent variables, and internationalization performance is the dependent variable. For the aesthetics of the model, each observation variable is simply named.

According to the regression coefficient table, the measurement error of the error variance is 0.146 - 0.343, and there is no negative error variance. In addition, the absolute value of the normalization coefficient value is 0.336 - 0.648, which does not exceed 0.95. The t values are all greater than 2.58, indicating that they are all significant. So the test of the overall model fit can be performed.

The fitting degree of the structural equation model M1 is verified, and the output report results are shown in Table 3 below. If the model has a high degree of fit, this model is available. In general, $GFI > 0.8$, $\chi^2/df < 5$, $0.05 < RMSEA < 0.1$ belong to the acceptable range, and the model fits well with the data when $\chi^2/df < 2$, $RMSEA < 0.05$, $GFI > 0.9$. It's better when GFI, IFI, TLI and CFI are closer to 1.

TABLE III. FITTING DEGREE OF THE STRUCTURAL EQUATION MODEL M1

	Default model	Saturated model	Independence model
CMIN/DF	1.659	-	2.638
GFI	0.765	1.000	0.463
IFI	0.646	1.000	0.000
TLI	0.597	1.000	0.000
CFI	0.629	1.000	0.000
RMSEA	0.073	-	0.115

As can be seen from Table 3, the χ^2/df and RMSEA values of M1 meet the fitting requirements, but the GFI is only 0.765, and the IFI, TLI, and CFI are small, indicating that the model does not fit the data well. Therefore, model correction is needed.

2) Correction of Structural Equation Model

The assumption of the structural equation model is that the residual is independent of the latent variable, so we can't establish a relationship between the error and the latent variable, so establishment of the correlation between the residual terms for model correction are needed.

TABLE IV. FITTING DEGREE OF THE CORRECTION EQUATION MODEL

	Default model	Saturated model	Independence model
CMIN/DF	1.373	-	3.027
GFI	0.833	1.000	0.481
IFI	0.855	1.000	0.000
TLI	0.816	1.000	0.000
CFI	0.844	1.000	0.000
RMSEA	0.055	-	0.128

First, associations are established between the residual items whose M.I. value is greater than 6. However, it still cannot meet the fitting requirement so items with lower normalization coefficients are deleted according to the normalized coefficient table. After establishing the residual term association and eliminating five observation variables, the modified model is obtained. Table 4 shows the fitness indicators for the revised model.

According to Table 4, χ^2/df , GFI, IFI, TLI, CFI, and RMSEA all meet the requirements of the fitness index, indicating that the model and data can be well matched after the correction, and the modified model is called M2.

3) Model Verification

The hypothesis verification of the modified structural equation model M2 by using AMOS 21.0 yields the results as shown in Table 5. As can be seen from Table 5, the three factors: entrepreneurial ability, human resources and relationship network all have positive effects on the internationalization performance of SMEs, among which the influence of entrepreneurial ability and relationship network is more significant.

TABLE V. RESULT OF VERIFICATION

Hypothesis	Path coefficient	T value	P	result
Hypothesis 1	0.41	3.202	0.001	valid
Hypothesis 2	0.18	2.75	0.006	valid
Hypothesis 3	0.60	3.459	0.001	valid

4) Result of Empirical Analysis

Through the above analysis, it can be concluded that entrepreneurial ability, human resource and social networks all have positive effects on the internationalization performance of SMEs. Among them, the role of the social network is the most obvious.

More specifically, the most significant role for entrepreneurial competence is the entrepreneur's ability to manage, learn, and discover market opportunities. In addition, the entrepreneur's strategy and innovation ability is also an important part of the entrepreneur's ability. It also has a positive role in promoting the internationalization of SMEs. Entrepreneurs with international experience also have a positive impact on the internationalization of SMEs.

For human resource, "our employees have professional knowledge and skills" has a significant role in promoting the human resources of SMEs, and the role of employee creativity is more effective. In addition, systematic talent development is also important for SMEs.

Among the observed variables of the SME's social network, the most influential is the network with partners, followed by the network with suppliers and peers. The four observed variables are representative of the impact of old customers and the government on the SME social network. Their standardization coefficient is small, indicating that the role of old customers and the government in the SME social network is not obvious at this stage.

IV. SUGGESTIONS

Through the above research and analysis, this paper explores the enlightenment of this research from the perspectives of SMEs themselves and the government, hoping to provide some suggestions for the international growth of SMEs in China.

A. For SMEs

Entrepreneurs are the managers of SMEs and the founders and regulators of SME strategies. Entrepreneurs therefore have an important influence on the internationalization of SMEs. Entrepreneurs with strong management, learning, innovation, strategic and market opportunities can guide SMEs to internationalization. Therefore, for entrepreneurs of SMEs, they should focus on cultivating and exerting their own abilities, and learn to discover and identify market opportunities. In addition, it is also important to focus on accumulating and applying their international experience.

Employees are the foundation for the operation of the company and an important factor in its long-term competitive advantage. Since employees' loyalty, professionalism and creativity have a great impact on the human resources of SMEs, so enterprises should first establish stricter recruitment standards when recruiting employees to obtain quality employees. In addition, we must pay attention to cultivating employee loyalty, such as rewards instead of punishment, establishment of employee stock ownership system, establishment of a good corporate culture, etc., so that employees are loyal to the enterprise. It is also important for the ability training of employees. In addition to the necessary professional skills training, SMEs should also focus on the stimulation and cultivation of employees' creativity, and establish a systematic talent training program.

In terms of the network of SMEs, relationships with partners, suppliers, governments, financial institutions, etc. are very important. Reciprocal trust with partners helps SMEs and partners to establish long-term cooperative relationships, and also helps SMEs to obtain the resources needed for international development from their partners, thus making the international development of SMEs positive. Towards a role, SMEs should focus on cultivating and developing relationship with partners. In addition, SMEs should pay attention to and strive to maintain relationship with suppliers, because suppliers are an indispensable part of the SMEs' production chain, and maintaining good relationship with suppliers also contributes to international growth. Information between existing customers and peers also needs to be closely watched. Although the relationship between the government and the government in this survey and research is not significant enough for the internationalization of SMEs, many scholars have demonstrated the role of this relationship in the international growth of enterprises, thus precisely indicating the current stage. China's SMEs have not fully utilized and handled the relationship with the

government in the process of internationalization, which deserves more attention. SMEs should fully understand the government's relevant policies on the internationalization of SMEs, handle the relationship with government departments, and use government support to better internationalize.

B. For Government

From the questionnaire and the research results, the SMEs surveyed said that the relationship with the government is not an important factor influencing its internationalization. But in fact, SMEs account for the vast majority of the total number of Chinese enterprises, and play an important role in China's economic development. China's SMEs face many difficulties. If there is support and help from government departments, China's SMEs can better carry out internationalization. On the one hand, in response to the shortage of funds, lack of channels and channels encountered by SMEs in the process of internationalization, relevant government departments should introduce some favorable policies according to actual conditions, including tax reduction, subsidies, low-interest loans, and project cooperation. On the other hand, the government should provide more information and experience on internationalization to SMEs by virtue of its own advantages, organize exchange activities for SMEs' internationalization, make up for the shortcomings of insufficient information and experience, and expand their social network for SMEs. It is also possible to provide more favorable and convenient financing activities for SMEs jointly with financial institutions. In addition, the government should launch a systematic international talent training program, strengthen the training of international talents, train and support talents for the internationalization of SMEs, and help the international growth of SMEs.

V. CONCLUSION

Based on the theory of enterprise resource base, this paper discusses the impact of enterprise resources on the internationalization of SMEs in China from the perspective of enterprise resources.

In order to study the impact of enterprise resources on the internationalization of SMEs in China, this paper chooses to use the performance of SMEs' internationalization as an observation variable, and collect data and establish structural equation models to the enterprises by sending questionnaires to eligible SMEs. The influence of family ability, human resource and social network on the performance of SMEs' internationalization is studied.

The results show that the three factors of entrepreneurial ability, human resource and social network have positively promoted the performance of China's SMEs internationalization, and the role of the relationship network is the most significant.

More specifically, through empirical analysis, this paper finds entrepreneurs' ability of manage, learn, and identify market opportunities, employees who are creative, with expertise and skills and also systematic talent development programs, and good partners as well are resources that SMEs in China can use to improve their international performance.

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