"Avoid a Crisis" or "Out of the Crisis": A Study Based on the Impact of Manager Competence on Organizational Resilience of Small and Medium-Sized Enterprises

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Abstract: The frequent public crises in recent years have revealed that small and medium-sized enterprises lack crisis management capabilities and organizational resilience. Under the stimulus of external crisis, the managers' ability of small and medium-sized enterprises has a great impact on the risk-taking and resilience level of enterprises. Taking small and medium-sized enterprises in Shanghai and Shenzhen A-shares as samples, this paper empirically analyzes the relationship among managers' ability, corporate risk-taking level and organizational resilience. The results show that the stronger the ability of managers, the higher the resilience level of small and medium-sized enterprises, and the higher the risk-taking level of enterprises. In addition, the enterprise's risk-taking level plays a part of intermediary role in the relationship between managers' ability and the organizational resilience of small and medium-sized enterprises; The digital transformation is positively adjusting the relationship between managers' ability and the level of corporate risk-taking. The research results enrich the relevant literature and provide a certain reference for the selection of managers and digital transformation of enterprises.

Keywords: Manager's Ability, Organizational Resilience, Enterprise Risk-taking Level, Digital Transformation, Small and Medium-sized Enterprisesalic font style.

1 INTRODUCTION

Connecting small and medium-sized enterprises with thousands of households is an important force to promote innovation, promote employment and improve people's livelihood. However, in recent years, public crises have occurred frequently, and the global economy has become increasingly complex. Small and medium-sized enterprises are facing various unknown risks, financing problems, internal management problems, etc. Because of their small scale, insufficient funds and poor liquidity, their competitiveness is weak in the face of sudden market fluctuations and policy changes, and it is urgent to improve their ability to cope with crises and improve their organizational resilience. Resilience is generally regarded as an ability to effectively deal with crises, avoid injuries and develop further. Especially for highimpact and low-probability events, it can realize early warning, form redundant supply, reduce vulnerability and increase flexibility. In the fierce market competition environment, how can small and medium-sized enterprises ensure their sustainable development? In addition, under the background of China's vigorous development of digital economy, the digital transformation of enterprises is an inevitable trend of economic development. Will the digital transformation of enterprises affect the risk-taking level of enterprises? In order to answer this question, this paper empirically tests the relationship between managers' ability and the resilience of small and medium-sized organizations, taking China's A-share listed small and medium-sized companies from 2010 to 2021 as samples, and further explores the intermediary role of risk-taking and the regulatory role of digital transformation.

The possible research contributions of this paper are as follows: First, focusing on small and medium-sized enterprises, this paper studies the influence of their management ability on their organizational resilience, enriches the research content on the sustainable development of small and medium-sized enterprises, and is of great significance to the realization of specialized and new development of small and medium-sized enterprises. Secondly, the application of dynamic capability theory is extended and the antecedents of organizational toughness are tested. The possible mechanism of the formation of organizational toughness is clarified theoretically, which is helpful to expand the mechanism research on the influence of managers' ability. Thirdly, the digital transformation is brought into the research framework, and the impact of the degree of enterprise digital transformation on the managers' ability and the risk-taking level of small and medium-sized enterprises is explored, which enriches the research content of digital transformation and provides countermeasures and reference for promoting the digital transformation of small and medium-sized enterprises.

2 LITERATURE REVIEW AND RESEARCH HYPOTHESIS

2.1 Managerial Ability and Organizational Resilience

The manager's ability is embodied in many aspects, including the manager's knowledge, experience and values. It reflects the manager's professional ability to deal with complex issues such as opportunity identification, risk taking and resource integration. It plays a very important role in small and medium-sized enterprises to obtain sustainable competitive advantages. Based on the high-level theory, when an enterprise is in crisis, it is necessary to have a hero who can save the crisis, i.e. a manager with superior ability. They often show extraordinary learning ability and calling spirit, that is, they can keenly perceive the changes in the external environment, identify the risk factors that may cause disasters to the enterprise, activate the collective wisdom and initiative of the employees of the company, and implant resilience genes for the sustainable development of small and medium-sized enterprises. In small and medium-sized enterprises, the manager is the key figure in the enterprise organization, which always affects the subordinate's behavior and team atmosphere. The leader's ability to think strategically during a crisis determines whether an organization can survive for a long time. He is at the top of the pyramid in the organization's power position and is considered as an important trigger for resilience. When there are challenges, crises and other stimulus factors in the environment, the employees of the enterprise often do not have such resilience consciousness. They need the stimulation of managers with crisis

consciousness to trigger the collective psychology of the team to deal with together, and then produce team resilience, which is also called "peer effect"^[10]. Therefore, the key to the development of organizational resilience in small and medium-sized enterprises is to cultivate the ability of managers.Based on this, hypothesis 1 is proposed:

H1: Managers' ability has a positive impact on the organizational resilience of SMEs.

2.2 Manager's Ability and Enterprise's Risk-taking Level

Corporate risk-taking reflects the overall investment strategy of the enterprise and the risk preference of the managers, while the managers' ability reflects the managers' cognitive level and ability to handle affairs^[5]. According to the "risk-taking hypothesis" of the butler's theory in modern management, the more capable the manager is, the more capable he is of taking risks. First of all, high-caliber managers often have a different vision from ordinary people. They can accurately judge customers' needs in the rapidly changing market environment, and can also find investment opportunities, assess the value of potential investment opportunities, and effectively control risks when improving the efficiency of enterprises' investment projects. As a result, the level of enterprises' risk-taking will be higher. Secondly, managers with strong capabilities generally have strong social resources and relationship networks, which have an important impact on the establishment of a stable and sustainable trading model. They can enhance the timeliness and stability of resource supply in business activities, optimize and integrate the allocation of enterprise resources, reduce the risks in the decision-making process, and provide resource guarantee for high-risk projects. In addition, the more capable managers are, the better they will be able to prepare a complete risk response plan in advance. Even if a crisis occurs, they will be able to calmly respond with professional skills, minimize losses and realize the sustainable development of the enterprise. Therefore, based on the above analysis, the following assumption 2 is proposed:

H2: The ability of managers has a positive impact on the level of corporate risk-taking.

2.3 The Intermediary Role of Enterprise Risk-taking Level

Most of the listed companies of small and medium-sized enterprises are in the growth stage, and they are high-growth and small-scale enterprises. Financing is relatively difficult and has a great demand for financing. As the person in charge of enterprise management and investment decision-making, managers' own management ability will naturally affect the final investment and decision-making of enterprises, that is, the level of enterprise risk-taking^[2]. In addition, some strategic plans made by the company are usually accompanied by potential risks, such as mergers and acquisitions, diversified businesses, new product research and development, etc., which are often related to the management ability of small and medium-sized enterprises. According to the dynamic capability theory, enterprises can reconstruct internal resources according to environmental changes, quickly integrate existing resources, and realize enterprise development. Organizational toughness is an important dynamic capability of an enterprise. The stronger the ability of managers, the higher the risk-taking level of enterprises will be, not only can they control the losses in the process of strategy implementation, but more importantly, they can use their own risk management ability to gain the advantage of continuous competition, that is, according to environmental changes, quickly integrate resources and cope with risks, that is, the organizational resilience of enterprises. In small and medium-sized enterprises, the two rights of the company are basically in the hands of the same leader, and the risk-taking level of the enterprise mostly depends on the decision of the manager. Keri Ultrasonic Electronics Co., Ltd., a small and medium-sized enterprise in Foshan, Guangdong Province (hereinafter referred to as Keri Ultrasonic), was founded at the beginning, with many homogeneous enterprises, fierce market and low profit rate. In the case of continuous losses, most enterprises are unwilling to invest time and net profit to improve quality, but choose to reduce prices and thin profits to avoid risks. Ye Weizhong, the leader of Kerri Ultrasound, has always insisted on investing in research and development of new products. Under the unified leadership of Ye Weizhong, he has continuously optimized product quality, appearance design and cost, constantly made progress against risks, firmly grasped the core technology, and maintained enough toughness and endurance again and again in the crisis, making it invisible to produce ultrasonic atomizing tablets in the high-end atomizing market. Therefore, the higher the ability of managers, the more they can enhance the risk-taking level of enterprises and further enhance the resilience of small and medium-sized enterprises. Based on the above analysis, this paper puts forward hypothesis 3:

H3: The level of enterprise risk-taking has an intermediary effect in the process of managers' ability affecting the organizational resilience of SMEs.

2.4 The Regulatory Role of Digital Transformation

Digital transformation is defined as the transformation of information technology^[4], which generally involves changes in business processes, operating procedures^[3] and organizational capabilities^[8] as well as ways to enter new markets or exit current markets. Digital transformation is characterized by the application of artificial intelligence, blockchain, cloud computing, big data and other underlying technologies in the organizational structure and management mode of enterprises, which may affect the willingness to take risks and financial situation of enterprises by influencing management behavior, reshaping the internal governance system of enterprises and improving the external environmental constraints of enterprises. Therefore, digital transformation can alleviate the agency contradiction between owners and management, reduce agency costs, thereby improving the level of enterprise risk, and provide a good environment for the improvement of enterprise risk. In addition, the digital infrastructure that enterprises rely on for digitalization can improve managers' ability, help managers to capture business information more comprehensively, and ensure that the implementation of business processes is more stable and reliable. In the digital environment of enterprises, the control constraints of managers and ordinary employees will not vary from person to person, and the internal information communication of enterprises will be more transparent and smooth, which will further enhance the effectiveness of control environment, control activities, information communication and supervision. Therefore, the digitalization of enterprises has a regulating effect on the relationship between managers' ability and enterprise risk-taking level^[9]. Based on this, this paper puts forward hypothesis 4:

H4: Digital transformation has a positive regulatory effect on the relationship between managers' ability and the risk-taking level of SMEs.

The conceptual model studied in this paper is shown in Figure 1.



Figure 1: This caption has one line so it is centered.

3 VARIABLE INDICATORS AND EMPIRICAL MODELS

3.1 Data Sources

The data are obtained from WIND and CSMAR Database. The sampling time is from 2010 to 2021 and the sample size is 15801. The companies with serious missing data samples, assetliability ratio greater than 100% and financial and insurance industries are excluded. Finally, the continuous variables are trimmed by 1% to 99%.

3.2 Variable Selection

3.2.1 Explained Variable

Organizational resilience. Learn from Lv^[6] to test organizational resilience from two dimensions: long-term growth and financial fluctuation. Long-term growth is measured by the accumulation of three-year net sales growth, and financial fluctuation is measured by the return on stocks. For the annual stock return, the standard deviation of the monthly stock return is calculated first, and then the annual stock return is calculated according to the monthly stock return. Finally, the Organizational resilience is comprehensively calculated by entropy method.

3.2.2 Explanatory Variable

Manager's ability. This paper uses the DEA-TOBIT model to measure managers' ability (MA) by referring to the research of Demerjian^[1]. The specific steps of this method are as follows: In the first stage, the data DEA efficiency model is used to measure the productivity of enterprises by industry and year. Taking Revenue as the output variable, operating cost (OCC), sales expenses and management expenses (SME), net fixed assets (NFA), net intangible assets (NIA), goodwill (BR) and R&D expenditure (RD) as input variables, the following model is established.

$$MAX(\delta) = \frac{Revenue}{\alpha_1 OCC + \alpha_2 SEM + \alpha_3 NFA + \alpha_4 NIA + \alpha_5 BR + \alpha_6 RD}$$
(1)

In the second stage, the manager's ability is estimated. The efficiency calculated by the above formula includes both the efficiency of the manager's ability creation and the efficiency of the company's idiosyncratic creation. Therefore, in order to eliminate the influence of corporate level on efficiency, this paper selects the following six factors that may affect the production efficiency of the enterprise: corporate size (CS), market share (MS), free cash flow (FCF), listing life (LY), diversified operation (DO) and overseas operation (OB) for Tobit regression, and the residuals obtained from the regression can be used to measure managers' ability (MA). The specific calculation model is as follows:

$$\delta = \beta_1 CS + \beta_2 MS + \beta_3 FCF + \beta_4 LY + \beta_5 DO + \beta_6 OB + \varepsilon$$
⁽²⁾

3.2.3 Intermediary Variable

Enterprise Risk Undertaking (RiskT). this paper uses the earnings volatility during the observation period of the enterprise to measure the enterprise risk-taking level (RiskT), and uses the practice of Yu Minggui ^[12] and others for reference. First, calculate ROAi, which is the ratio of the enterprise's profit before tax, interest, depreciation and amortisation for Year I to the total assets at the end of the year. Second, the volatility is calculated by first adjusting the industry average adopted by the enterprise every year, and then calculating the standard deviation adjusted by the industry in each observation period. The risk exposure level (RiskT) of the enterprise is as follows:

$$RiskT_{it} = \sqrt{\frac{1}{T-1}} \sum_{t=1}^{T} (AdjROA_{it} - \frac{1}{T} \sum_{t=1}^{T} AdjROA_{it})^{2}$$
(3)

$$AdjROA_{it} = \frac{EBIT_{it}}{Asset_{it}} - \frac{1}{X} \sum_{k=1}^{X} \frac{EBIT_{kt}}{Asset_{kt}}$$
(4)

i represents the enterprise and t represents the year of the observation period.

3.2.4 Regulatory Variables

Digital transformation., Drawing on the experience of Wu Fei^[11] in their research on digital transformation, they selected five key words about digital as feature words, including artificial intelligence technology, big data technology, cloud computing technology, block chain technology and digital technology application. Using Python statistical annual report in the frequency of the occurrence of keywords, sum up to digital transformation of the total index, and then take the natural log measurement.

3.2.5 Control Variables

Drawing lessons from previous research, the control variables are Size and Age of enterprise, debt-to-asset ratio, executive compensation, government subsidy, return on total assets, dual, independent director ratio, cash flow, shareholder holding ratio, sales growth rate, year and industry

3.3 Model Design

Construct the panel regression benchmark model in the following form:

$$Org_{it} = \alpha_0 + \alpha_1 MA _ Score_{it} + \sum \alpha_k Control_{it} + \sum Ind + \sum Year + \varepsilon_{it}$$
(5)

Model (1) is used to verify hypothesis 1. 0 is the intercept term, where α_i is the regression coefficient and ε it is the random error term. If the coefficient of MA is significantly positive, it indicates that managers' ability can promote organizational resilience.

In order to further investigate the intermediary role of enterprise risk-taking level, according to the commonly used three-step method of intermediary role test, the following extended model is constructed:

$$Org_{it} = \alpha_0 + \alpha_1 MA _ Score_{it} + \sum \alpha_k Control_{it} + \sum Ind + \sum Year + \varepsilon_{it}$$
(6)

$$RiskT_{it} = \beta_0 + \beta_1 MA _Score_{it} + \sum \alpha_k Control_{it} + \sum Ind + \sum Year + \varepsilon_{it}$$
(7)

$$Org_{it} = \gamma_0 + \gamma_1 MA _ Score_{it} + \gamma_2 RiskT + \sum \alpha_k Control_{it} + \sum Ind + \sum Year + \varepsilon_{it}$$
(8)

Equations (6)-(8) focus on the parameters α_1 , β_1 , γ_1 and γ_2 . If β_1 is significant, it indicates that the manager's ability will affect the risk-taking level of the enterprise. On this basis, if γ_1 and γ_2 are both significant and the absolute value of γ_1 is less than the absolute value of α_1 , then it is considered that the enterprise's risk-taking plays a part of intermediary role between managers' ability and organizational resilience; If γ_2 is significant, but γ_1 is not significant, it indicates that risk-taking plays a complete mediating role between managers' ability and organizational resilience.

In order to examine the moderating effect of digital transformation on managers' ability to bear corporate risks, the following expansion model was constructed:

$$Org_{ii} = \alpha_{e} + \alpha_{i}MA_{ii} + \alpha_{2}DCG_{ii} + \alpha_{3}MA_{ii} \times DCG_{ii} + \sum \alpha_{e}Control_{ii} + \sum Ind + \sum Year + \varepsilon_{ii}$$
(9)

In formula (9), the significant regularity of α_3 coefficient indicates that the digital transformation has a positive moderating effect on the manager's ability and the level of enterprise risk commitment; otherwise, it has a negative moderating effect.

4 EMPIRICAL ANALYSIS

4.1 Descriptive Statistics

Table 1 makes descriptive statistics on the main variables. It can be seen from the table that there is a big gap between the resilience level of SMEs and the ability of managers. The

average risk-taking of enterprises is 0.027, which shows that the overall risk-taking degree of small and medium-sized enterprises is not very high. In terms of digital transformation, the average value of control variables is close to the median value as a whole, so it shows that the sample does not have a big deviation.

Variables	Obs	Mean	Std. Dev.	Min	Median	Max
Org	15801	4.041	1.744	0.65	3.764	96.617
MĂ	15801	-0.04	0.171	-0.6	-0.03	0.545
RiskT	15801	0.027	0.026	0	0.019	0.118
DCG	15801	2.075	1.118	0.69	1.946	4.356
Age	15801	20.01	6.075	2	20	67
Lev	15801	44.05	20.19	1.1	43.71	195.66
Pay	15801	5.365	0.738	-0.17	5.327	9.081
Gov	15801	16.5	1.587	0	16.5	22.735
ROA	15801	4.05	7.626	-93	4.006	96.864
Dual	15801	0.29	0.454	0	0	1
Indep	15801	37.68	5.588	14.3	36.36	80
CF	15801	1.060	7.240	-4.34	1.58	3.667
INS	15801	39.15	23.98	0	39.73	326.73
Top1	15801	33.69	14.99	2.43	31.2	89.09
Grow	15801	0.515	17.3	-0.95	0.126	1878.4

Table 1 Descriptive Statistics

4.2 Correlation Analysis

Table 2 shows the Pearson correlation coefficient test results for the study variables. The correlation coefficient between each variable is less than 0.5, and the VIF value of each variable is far less than 2. Therefore, there is no multicollinearity problem in the regression model.

Table 2 Analysis of Regression Results

Variables	Org	MA	RiskT	DCG	VIF
Org	1				1.19
MA	0.039***	1			1.16
RiskT	0.077^{***}	0.077^{***}	1		1.07
DCG	0.023***	0.054^{***}	0.041^{***}	1	1.08
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Note: Due to space reasons, only the correlation results of main variables are shown.

4.3 Analysis of Empirical Results

4.3.1 Management Ability and Organizational Resilience

Through the White test, it is found that the results reject the original assumption that the sample may have heteroscedasticity. Referring to relevant literature, this paper uses the generalized least squares (GLS) to solve the problem of heteroscedasticity. The regression results are shown in Table 3. Model 1 is the regression result of manager's ability to enterprise's organizational resilience. The MA coefficient in Model 1 is 0.215 and significant at the level of 1%. The sign is positive, i.e. there is a positive relationship between manager's ability and enterprise's organizational resilience, indicating that manager's ability is very

important. The stronger manager's ability, the stronger enterprise's organizational resilience. Hypothesis 1 is verified.

4.3.2 The Ability of Managers and the Level of Enterprise Risk-taking

Model 2 is the regression result of managers' ability to undertake risks to the enterprise. Among them, the coefficient of management ability (MA) is 0.015 and is significantly positive at 1%, indicating that with the improvement of management ability, the enterprise's risk-taking level will be higher. Hypothesis 2 is verified. When facing crises and challenges, high-caliber managers have better opportunities to explore, identify risks and integrate resources. With rich corporate governance experience, they can keenly detect the information contained in environmental changes, identify potential risks in innovative projects, quickly adjust strategies, avoid strategic risks and improve the risk-taking level of small and medium-sized enterprises.

Variables	(1)Org	(2)RiskT	(3)Org	(4)RiskT
MA	0.215***	0.015***	0.139***	0.008^{***}
	(13.55)	(29.96)	(7.53)	(7.69)
RiskT	. ,		5.057***	
			(58.88)	
DCG				0.001
				(1.62)
MA×DCG				0.031***
				(7.18)
Controls	yes	yes	yes	yes
cons	4.667***	0.051***	4.431***	0.051***
	(115.19)	(43.92)	(86.03)	(39.61)
Ν	15801	15801	15801	15801
Chi-squared	93496.578***	28460.347***	188635.710***	65614.445***

Table 3 Analysis of Regression Results

Note: T statistics are in brackets, and * *, * * and * represent the significance levels of 1%, 5% and 10% respectively, as above.

4.3.3 The Intermediary Role of Risk taking

Model 3 is the regression result after adding the intermediate variable of risk taking (RiskT). It can be seen that the coefficient of manager ability (MA) is 0.139, which is significantly positive at the level of 1%, and the coefficient of risk taking (RiskT) is 5.057, which is also significantly positive at the level of 1%. According to the test method of mediating effect, as the managerial competence (MA) of model 1 and model 2 is positively significant to organizational resilience and enterprise risk-taking level at 1%, and the managerial competence (MA) and risk-taking (RiskT) of model 3 are also positively significant to organizational resilience at 1%, therefore, The test proves that risk-taking plays a part in mediating the effect of managers' ability on the organizational resilience of an enterprise, i.e. the higher the managers' ability, the higher the risk-taking level of an enterprise can be, thus further promoting the organizational resilience of small and medium-sized enterprises cannot be achieved without the performance of the enterprise's organizational resilience. The stronger the manager's ability, the more flexible he will be in dealing with the risks and

challenges of the uncertain market. As a result, the enterprise's risk-taking level will also be improved, and the resilience of small and medium-sized enterprises will also be stronger.

4.3.4 The Regulating Function of Digitalization

Model 4 adds the interaction item (MA×DCG) between managers' ability and digital transformation to test the moderating effect of digital transformation (DCG). The regression results show that the interaction item (MA×DCG) coefficient between managers' ability and digital transformation is 0.031, and it is significantly positive at 1%, which verifies the positive moderating effect of digital transformation (DCG), indicating that digital transformation enhances the promotion effect of managers' ability on the risk-taking level of small and medium-sized enterprises, and hypothesis 4 is verified. Reducing operational risk requires the enterprise to obtain more information, thus reducing the probability of decision deviation. Digital transformation can help enterprises to improve their information processing capabilities, especially the ability to explore and analyze non-standardized data, which can give full play to the regulatory role of enterprise information processing systems in business decisions and production processes. Under the support of digital technology, enterprises promote their decision-making accuracy by absorbing new market information, and improve their risk-taking ability by correcting their deviations.

4.4 Robustness Test

In order to make the research conclusion more robust and reliable, the robustness test is carried out by replacing variables and reducing years respectively. Based on the practice of Peter and other scholars^[7]. the variable replacement method is to sort the regression residuals into four groups from small to large, and measure the manager's ability (MA4) by assigning it to 1, 2, 3 and 4. The higher the assignment, the stronger the manager's ability. Re-substitution into the above model for regression analysis. Shortening the year is to choose the range of 2012-2021, and the regression results all verify the above assumptions again. Tables 4 and 5 are the regression results of robustness test.

Variables	(1)Org	(2)RiskT	(3)Org	(4)RiskT
MA4	0.035***	0.002^{***}	0.020^{***}	0.002^{***}
	(18.35)	(32.65)	(6.81)	(12.23)
RiskT			4.902***	
			(51.18)	
DCG				-0.001***
				(-2.85)
MA4×DCG				0.027^{***}
				(3.95)
Controls	yes	yes	yes	yes
cons	4.588^{***}	0.047^{***}	4.410^{***}	0.048^{***}
	(116.19)	(36.34)	(83.69)	(34.63)
N	15801	15801	15801	15801
Chi-squared	30493.726***	30815.167***	79916.220***	38727.582***

Table 4 Regression Results of Alternative Variables

Variables	(1)Org	(2)RiskT	(3)Org	(4)RiskT
MA	0.248***	0.018^{***}	0.103***	0.011***
	(17.74)	(40.11)	(5.35)	(13.76)
RiskT			4.460^{***}	
			(48.19)	
DCG				0.000^{***}
				(4.82)
MA×DCG				0.003***
				(9.59)
Controls	yes	yes	yes	yes
cons	5.081***	0.039^{***}	4.967^{***}	0.041^{***}
	(115.08)	(55.94)	(102.04)	(56.26)
N	14323	14323	14323	14323
Chi-squared	99863.209***	191653.25***	63404.523***	205167.20***

Table 5 Regression Results of Alternative Variables

5 CONCLUSIONS AND ENLIGHTENMENT

In the difficult recovery of the global economy, how to improve the ability of managers to improve the level of corporate risk-taking and enhance the organizational resilience of small and medium-sized enterprises has become a very important issue in the research on the sustainable development of small and medium-sized enterprises. This paper uses data envelopment analysis to measure managers' ability, and uses the data of Shanghai and Shenzhen A-share small and medium-sized enterprises from 2010 to 2021 to empirically test the relationship among managers' ability, enterprise risk-taking level and organizational resilience of small and medium-sized enterprises, and the impact of digital transformation on managers' ability and enterprise risk-taking level. The following conclusions and inspirations are drawn: (1) The ability of managers is positively correlated with the firm's resilience level. Improving the ability of managers is beneficial to improving the organizational resilience level of small and medium-sized enterprises. (2) to increase the ability of managers is helpful to improve the risk-taking level of SMEs. (3) The level of risk-taking plays an intermediary role in the influence of managers' ability on the organizational resilience of small and mediumsized enterprises. (4) Digital transformation is significantly adjusting the relationship between managers' ability and risk-taking level of small and medium-sized enterprises, that is, the degree of digital transformation of enterprises can significantly promote the relationship between them. Therefore, in the appointment of managers in small and medium-sized enterprises, attention should be paid to the selection of managers, focusing on the selection of managers with high risk awareness, adaptability and risk-taking level. In addition, it is strengthening daily training and learning, giving more incentives to attract and retain talents, encouraging managers to take risks, enhancing the core competitiveness of enterprises and laying a solid foundation for the sustainable development of small and medium-sized enterprises. In addition, in order to cultivate the crisis awareness of the company team, the formation of the organizational resilience of small and medium-sized enterprises is by no means a last-minute cramming or a brainwave when the crisis comes, or it depends on the super-high resilience of managers, but is the result of long-term accumulation and cultivation, which requires the collective efforts of team members. Finally, clarify the transformation

objectives and gradually promote the pace of digital transformation. At present, small and medium-sized enterprises are relatively lack of digital marketing capabilities and information security measures. Therefore, it is necessary to clarify the transformation objectives and gradually promote the process of digital transformation. Through the advanced digital technology to achieve cost reduction and efficiency, optimize the allocation of resources, social coordination and improve value creation, etc., to ensure the authenticity and symmetry of information, to provide a basic guarantee for the improvement of managers' ability, so as to improve the market competitiveness of small and medium-sized enterprises.

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