Research Article

The Influence of Core Technology Capability of High-Tech Industry on Sustainable Competitive Advantage

Xi Liu o and Shuai Yang

Glorious Sun School of Business and Management, Donghua University, Shanghai 200051, China

Correspondence should be addressed to Xi Liu; 1179195@mail.dhu.edu.cn

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In order to explore how the core technological capabilities of the high-tech industry affect the sustainable competitive advantage of an enterprise, by consulting a large number of literature studies on sustainable competition, the characteristics of high-tech enterprises were summarized through analysis and sorting and a sustainable competition model was proposed based on market, management, marketing, strategy, and organizational innovation. Through factor analysis, correlation analysis, and structural equations of 266 survey data of related companies, the effectiveness of the model based on the impact of core capabilities of high-tech companies on sustainable competitive advantage was confirmed. The results show that the core competencies of high-tech enterprises' market recognition, strategic planning, management and operation, full-person marketing, and dynamic marketing directly affect the company's sustainable competitive advantage is market awareness, and the organizational innovation of the company can also influence the sustainable competitive advantage indirectly, while dynamic marketing can increase the other four capabilities to improve the sustainable competitive advantage of the enterprise. The theoretical model is established to identify the core technological capabilities of high-tech enterprises that can help enterprises effectively identify the core technological capabilities that can form a sustainable competitive advantage and then provide ideas for enterprises to build theoretical research on core technological capabilities.

1. Introduction

Perpetual competition refers to the sustainable competitive advantages, attributes, or capabilities of company assets that are difficult to copy or surpass and provides a long-term or advantageous position that is superior to competitors [1, 2]. Perpetual competition generally goes through three stages: the formation of competition, the maintenance of competition, and the demise of competition. Several pieces of the literature have been reported on the study of sustainable competition. Xu et al. revealed the characteristics of China and India's sustainable advantages and clarified that China and India have different impacts on the imports of related fields in the United States [3]. Zeng et al. proposed that the role of information systems was played in developing countries and sustainable information infrastructure [4]. Feng et al. pointed out that if innovation and scientific

research continuing in the high-tech industry, enterprises would maintain a competitive advantage [5]. Thuethongchai et al. reported service industry organizations used big data analytic to build the ability to gain a competitive advantage and the ability to respond quickly and accurately to market demands [6]. Prabowo et al. identified the ability to develop new products based on the perspective of inactive issues gave small medium-sized enterprises various competitive advantages [7]. Gross-Gołacka et al. attempted to improve the sustainable competitive advantage for enterprises by improving the knowledge ability of managers [8]. Hu et al. argued industry-level international mergers and acquisitions had a significant negative impact on the sustainable performance of the acquirer's competitors [9]. Erokhin et al. established policy measures to competitive advantages in agricultural field [10]. All the literature is basically based on different industries for research, but does not analyze the

impact of core technological capabilities on the establishment of sustainable competitive advantages of the enterprise as a whole, so there is still a vacancy in this area of research.

The core technical capabilities are the necessary and sufficient capabilities to ensure that organizations can take advantage of changing technology and service markets to gradually gain business advantage [11, 12]. There have been many reports on the research of core technical capabilities. Jin et al. (2020) considered the impact of cluster technology innovation capability on the long-term development of the cluster, and found that the improvement of cluster technology innovation capability promoted the development of the industry [13]. Zhou et al. used theory to create a theoretical framework of data-based core technical capabilities [14]. Wu et al. determined that the core technical capabilities were critical to the performance of seller-managed retail companies [15]. Chen et al. found that core technical capabilities played a very important role in improving the competitiveness of enterprises [16]. Martínez-Román et al. (2017) showed the adoption of technology, the entrepreneurs' motivations, business plans and cooperation in research, and development activities were important factors [17]. Heidari et al. studied the impact of corporate leadership and teams on corporate core technology [18]. López-Cabarcos et al. found that technological capabilities had a moderating effect on the performance relationship of knowledge companies [19]. It is not difficult to see from the existing research results that the core technology capability of an enterprise is a prerequisite for sustainable competition and an important guarantee for the development of the company. Therefore, it is of great significance to study the impact of core technology capability on the sustainable competitive advantage of an enterprise.

Based on the summary of previous research results, the characteristics of high-tech enterprises and theories based on market, management, marketing, strategy, and organizational innovation were deduced, the constituent elements of the core technological capabilities of high-tech enterprises were clarified, and the theoretical model and related research hypotheses were put forward to identify the core technological capabilities of high-tech enterprises under sustainable competitive advantages. Through research on high-tech enterprises and model verification through questionnaires, the revised model was finally obtained, which will provide a theoretical basis for the company's core technology capability construction and sustainable development research.

The remainder of this paper is organized as follows. Section 2 provides the method of this research. Section 3 presents the results of this research. This is followed by discussion in Section 4. Finally, the conclusions of this study are given in Section 5.

2. Methodology

The literature research method is used to summarize relevant documents such as technical capabilities and sustainable competitive advantages. Based on relevant literature, combining the theoretical knowledge of market, management, marketing, strategy, and organizational innovation to

study the mechanism of the impact of core technological capabilities on sustainable competitive advantage, and put forward the theory of identifying the core technological capabilities of high-tech enterprises from the perspective of sustainable competitive advantage.

2.1. Questionnaire Survey. The target of this investigation and research is mainly high-tech enterprises, including electronic information technology companies, new energy technology companies, biomedical technology companies, new material technology companies, aerospace technology companies, and high-tech service companies; those are the six types of high-tech industries. The research is conducted through field surveys and questionnaire surveys. Among them, the main objects of field investigation are the company's senior management personnel, who are relatively familiar with the company's business processes and development and operation methods. The main objects of the questionnaire can be corporate executives or department managers, who are very familiar with the company's operating conditions. In order to ensure the validity of the data, a total of 320 questionnaires are distributed in this preliminary survey, and 300 questionnaires are withdrawn, excluding questionnaires with obvious errors and incompleteness; 266 valid questionnaires are finally obtained, accounting for 88.6%, which meets the relationship between the number of survey samples and the number of measurement items.

Pre-survey: in order to ensure the rationality of the survey data, first after a small-scale pre-survey including a questionnaire survey and a small-scale interview, the expression and understanding of the questionnaire is modified, and then a large-scale survey is conducted. The questionnaire is structured, which contains the following: (1) Explanation of the questionnaire, mainly to inform the interviewee about the purpose, significance, and confidentiality measures of the survey, and hope that the interviewee can fill out the questionnaire fairly, justly, and seriously. (2) The main content of the questionnaire involves three parts of the core technological capabilities, organizational innovation and sustainable competition of high-tech enterprises. There are 36 questions of which mostly single-choice questions, and the content of the questionnaire comes from the literature review. (3) Respondent information is related to the category and position of the company. The questionnaire option adopts a 5-level scale model, 1-5, which means from completely disagree to fully agree.

2.2. Reliability and Validity Analysis.

(1) Reliability analysis adopts Cronbach's α coefficient method of Yurdugül (2008), when the coefficient is between 0.7 and 0.8, it indicates that the questionnaire results have a high degree of credibility [20]. When the coefficient is between 0.65 and 0.7, the reliability is within the acceptable range, and when the coefficient is between 0.6 and 0.65, the reliability of the questionnaire survey results is not credible.

(2) Validity analysis adopts the Ratio Statistic Test (RST) method, judging by redundancy and sensitivity [21]. Redundancy degree (RD) represents the independence and redundancy of each indicator. When RD ≤ 0.5, it means the indicator is valid, and the smaller the value, the higher the validity. Sensitivity degree (SD) is the adaptability of different evaluation systems to evaluation indexes. When SD ≤ 5, the indexes are valid.

Due to the large degree of difference between each three-level indicator, before modelling, all data are normalized. The calculation method used in this case is to adopt an average weighting method for all results, calculate the final score of each indicator, and the normalized interval is [0,1]. The specific calculation equation is shown as follows:

$$X = \frac{x - x_{\min}}{x_{\max} - x_{\min}}.$$
 (1)

In order to effectively reduce the error, the consistency test is performed on all the matrices; the specific calculation equation is as follows:

$$CI = \frac{(\lambda_{\text{max}} - n)}{(n - 1)}.$$
 (2)

Here, \beth_{\max} is the maximum eigenvalue, which is the average value of Aw_i/w_i . w_i is the fractional vector of the rows of the matrix multiplied by the weight W and sum. Aw_i/w_i is the divisor of the matrix and its corresponding fraction vector. N is the number of data. The average random consistency indicator RI is used to determine the approximate range of inconsistency.

2.3. Analysis of Variance Adjustment Effect.

- (1) Analysis of Variance. It is used to study whether the variables controlled by multiple factors have a significant influence on the observed variables, and the influence relationship between the variables can be obtained. Campbell and Kulis's (2018) multivariate analysis of variance is used; if the *P* value is less than the significance level (0.05), it is considered that there is a significant difference between the control variable and the observed variable [22]. Otherwise, if the *P* value is greater than the significance level (0.05), it is considered that there is no significant difference between the control variable and the observed variable.
- (2) Adjustment Effect Analysis. The chromatographic analysis method is used to perform adjustment analysis on the regression model with product term [23]. After adding independent variables or adjusting external variables to regression model 1, the correlation between independent variables and adjusted dependent variables is focused on, and then optimize the values of independent variables and adjusted dependent variables. The paper compared hypothesis model 2 with model 1 and calculated the significance

of the overall evaluation index. If both model 1 and model 2 have a significant change or the input variable proportional coefficient has a significant change, this proves that the adjustable factor has a regulating effect on the variable.

3. Results

3.1. Descriptive Statistical Analysis. The target of this survey and research is mainly high-tech enterprises, which involves six types of high-tech industries. Through field surveys and questionnaires, the basic situation of the interviewed enterprises is shown in Figure 1. The establishment time distribution of the interviewed companies is relatively average, with the largest number of companies in 10–20 years, accounting for 36.1%. The size of the companies interviewed is mainly concentrated between 200 and 500 people and more than 500 people, accounting for 33.2% and 27.8%, respectively. The industry distribution of the interviewed companies is relatively even, with 96.7% of the companies in the major industries. The largest number is the new material technology industry, accounting for 20.3%, followed by the electronic information technology industry, accounting for 19.1%. The company's annual operating income ranging from 5 to 10 million covers most, which accounts for 34%. All of the above indicate that the results of this survey cover a wide range of industries and involve many companies, which can better explain the actual problems.

3.2. Reliability and Validity Test. It can be seen from Table 1 that the Cronbach values of all variables exceed 0.7, and it can be considered that the questionnaire used in this study has high reliability. As can be seen from Figure 2, the average value of each variable in the questionnaire is higher than the square of the highest value of the correlation coefficient of each variable. Based on the above analysis results, it can be seen that there is no strong correlation between the measurement items in the questionnaires, and this questionnaire has good discrimination validity.

3.3. Analysis of Variance of Control Variables. As shown in Table 2, in order to analyze whether there are significant differences in the market recognition ability, strategic planning ability, management operation ability, all-person marketing ability, dynamic marketing ability, organizational innovation, and sustainable competitive advantage of enterprises with different establishment time, scale, industry and operating income, ANOVA is conducted. The results show that for all variables, the P value is greater than 0.05, and the F value has not reached the significance level, which means that companies with different establishment time, scale, industry and operating income have not produced significant differences in market cognition ability, strategic planning ability, management operation ability, full marketing ability, dynamic marketing ability, organizational innovation, and sustainable competitive advantage. That is, the control variable has no significant effect on the measured variable.



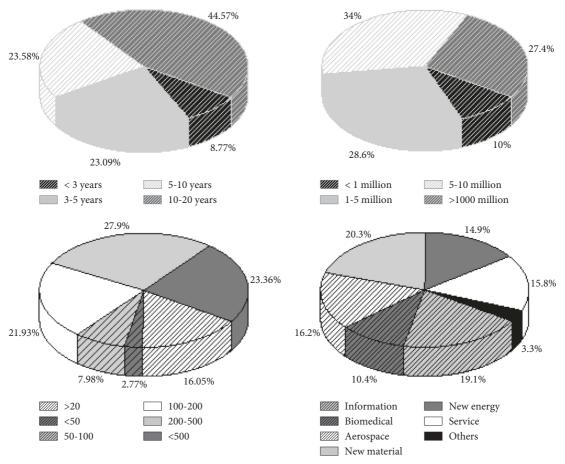


FIGURE 1: ANOVA results of control variables.

TABLE 1: Results of the reliability test of the variable.

Variable	Number of questions	Cronbach's α value
Market awareness	A1-A6	0.878
Strategic planning capabilities	B1-B6	0.830
Management and operation ability	C1-C14	0.929
Full marketing capabilities	D1-D4	0.799
Sustainable competitive advantage	E1-E4	0.830
Organizational innovation	F1-F6	0.856
Sustainable competitive advantage	G1-G5	0.872

3.4. Theoretical Model Test Results. Based on the references and data from the questionnaire, a theoretical model is established to identify the core technological capabilities of high-tech enterprises. As shown in Figure 3, the relationships among market cognition ability, strategic planning ability, management operation ability, full marketing ability, dynamic marketing ability and organizational innovation, and sustainable competitive advantage are established, and each influencing factor has a corresponding fitting coefficient. After establishing the relationship of error variables such as $\alpha 2$ and $\alpha 5$, $\beta 5$ and $\beta 6$, $\gamma 1$ and $\gamma 3$, $\gamma 12$ and $\gamma 14$ in the model, it is found that the theoretical model fit index has been improved. To verify its data, as shown in Table 3, the model fit index values obtained after the theoretical model correction are within the acceptable range (GFI index error

is 3.75%, which is within the acceptable range). The fit is in accordance with the standard of structural equation.

3.5. Hierarchical Regression Analysis of Dynamic Technical Capability Adjustment. Model 1 is a model without cross product term, and model 2 is a model with cross product term. Table 4 presents the adjustment effect of dynamic marketing ability on market cognitive ability. For model l, the F test value is 117.766 (P < 0.05), indicating that model l's results are significant. The regression coefficients of market knowledge ability and dynamic marketing ability are 0.057 and 0.054 (P < 0.05), indicating that market cognitive ability and dynamic marketing ability have a positive impact on sustainable competitive advantage. In model 2, the

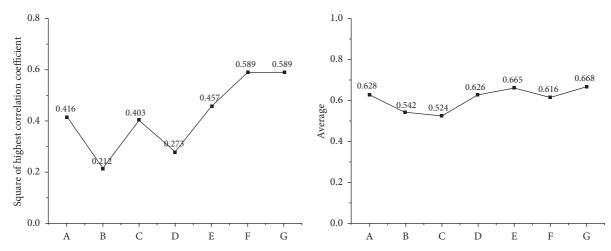


FIGURE 2: Discriminant validity analysis results of variables. (a) Market awareness. (b) Strategic planning capabilities. (c) Management and operation ability. (d) Full marketing capabilities. (e) Sustainable competitive advantage. (f) Organizational innovation. (g) Sustainable competitive advantage.

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Control variable	Time of establishment	Enterprise size	Industry in which the company is located value (P value)	Annual operating income		
Market awareness	25.700 (0.520)	12.824 (0.613)	5.126 (0.665)	24.271 (0.568)		
Strategic planning capabilities	7.389 (0.366)	8.664 (0.359)	2.389 (0.391)	12.546 (0.354)		
Management and operation ability	18.476 (0.338)	11.022 (0.374)	0.823 (0.438)	23.643 (0.340)		
Full marketing capabilities	4.933 (0.488)	3.426 (0.500)	2.169 (0.506)	7.936 (0.479)		
Sustainable competitive advantage	24.593 (0.541)	9.277 (0.663)	0.817 (0.758)	18.485 (0.619)		
Organizational innovation	30.768 (0.323)	14.836 (0.392)	3.061 (0.459)	28.401 (0.360)		
Sustainable competitive advantage	60.040 (0.344)	30.464 (0.457)	4.048 (0.633)	57.448 (0.400)		

TABLE 2: ANOVA results of control variables

regression coefficient of the product term of market knowledge ability and dynamic marketing ability is 0.061 (P < 0.05), indicating that the product term has a significant impact on sustainable competitive advantage. Dynamic marketing capabilities have a regulatory effect between market knowledge capabilities and sustainable competitive advantage.

Table 5 displays the adjustment effect of dynamic marketing capabilities on strategic planning capabilities. For model l, the F test value is 110.659 (P < 0.05), indicating that model l results are significant. The regression coefficients of strategic planning ability and dynamic marketing ability are 0.066 and 0.047, respectively (P < 0.05), indicating that market cognitive ability and dynamic marketing ability have a positive impact on sustainable competitive advantage. In model 2, the regression coefficient of the product term of strategic planning capability and dynamic marketing capability is 0.075 (P < 0.05), indicating that the product term has a significant impact on sustainable competitive advantage. Dynamic marketing capabilities have a regulatory effect between strategic planning capabilities and sustainable competitive advantage.

Table 6 shows the adjustment effect of management operation ability on strategic planning ability. For model l, the F test value is 114.567 (P < 0.05), indicating that model l results are significant. The regression coefficients of strategic planning ability and management operation ability are 0.086

and 0.063 (P<0.05), respectively, indicating that market cognitive ability and management operation ability have a positive impact on sustainable competitive advantage. In model 2, the regression coefficient of the product term of strategic planning capability and management operation capability is 0.074 (P<0.05), indicating that the product item has a significant impact on sustainable competitive advantage. The management and operation capability has a regulatory effect between strategic planning capability and sustainable competitive advantage.

Table 7 describes the adjustment function of the marketing ability of all employees to the strategic planning ability. For model l, the F test value is 96.226 (P < 0.05), indicating that model *l* results are significant. The regression coefficients of strategic planning ability and marketing ability of all employees are 0.061 and 0.051 (P < 0.05), respectively, indicating that market cognitive ability and marketing ability of all employees have a positive impact on sustainable competitive advantage. In model 2, the regression coefficient of the product term of strategic planning ability and marketing ability of all employees is 0.068 (P < 0.05), indicating that the product term has a significant impact on sustainable competitive advantage; that is, the marketing ability of all employees has a regulatory effect between strategic planning ability and sustainable competitive advantage.

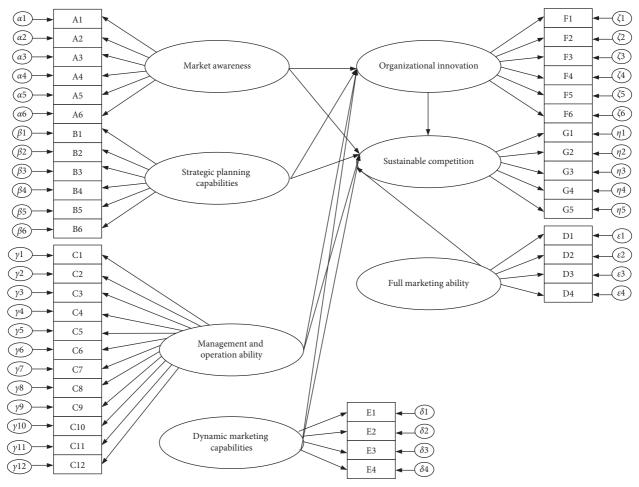


FIGURE 3: Model test to identify core marketing capabilities of high-tech enterprises.

TABLE 3: Theoretical model fit index.

		Sample	e value	•	
Fit inde	ex	Before correction	After correction		
	X^2/df	2.424	2.070	\leq 5 can be accepted, \leq 3 is a good fit	
Absolute fit index	GF1	0.727	0.770	>0.8 can be accepted, > 0.9 is a good fit	Good fit
	RMSEA	0.077	0.067	>0.1, the adaptability is not good; 0.08–0.1, the model is acceptable; 0.05–0.08, the adaptability is good, and <0.05, the fit is very good	Good fit
	NFI	0.755	0.800	>0.8 can be accepted, > 0.9 is a good fit	Good fit
Relative fitting index	IFI	0.840	0.886	>0.8 can be accepted, > 0.9 is a good fit	Good fit
	CFI	0.838	0.884	>0.8 can be accepted, > 0.9 is a good fit	Good fit
Parsimony fit	PNFI	0.683	0.692	>0.5, the simplicity of the model is good	Good fit
index	PCFI	0.758	0.764	>0.5, the simplicity of the model is good	Good fit

Through the above data, the original model is simply modified. In the revised model, market cognition ability, strategic planning ability, management operation ability, all-

person marketing ability, and dynamic marketing ability can directly affect sustainable competitive advantage, or indirectly affect sustainable competitive advantage through

Table 4: Analysis of the adjustment effect of dynamic marketing capabilities (market awareness-) sustainable competitive advantage).

	Model 1 Model statistics		Model 2		
			Wiodel 2		
R^2	0.493		0.500		
F test value	117.766		81.077		
Cia.	≤0.001		≤0.001		
Sig	Regression coefficients	Sig	Regression coefficients	Sig	
Market awareness	0.057	≤0.001	0.168	≤0.001	
Dynamic marketing capabilities	0.054	≤0.001	0.240	≤0.001	
Market awareness* dynamic marketing capabilities			0.061	0.038	

Table 5: Analysis of the adjustment effect of dynamic marketing capabilities (strategic planning capabilities→ sustainable competitive advantage).

	Model 1		Model 2	
	Model statistics	Wiodel 2	1110401 2	
R^2	0.482		0.503	
F test value	110.659		79.902	
Ci~	≤0.001		≤0.001	
Sig	Regression coefficients	Sig	Regression coefficients	Sig
Strategic planning capabilities	0.066	≤ 0.001	0.219	≤ 0.001
Dynamic marketing capabilities	0.047	≤ 0.001	0.291	≤ 0.001
Strategic planning capabilities* dynamic marketing capabilities			0.075	0.007

Table 6: Analysis of the adjustment effect of dynamic marketing capabilities (management and operation ability→ sustainable competitive advantage).

	Model 1		Model 2		
	Model statistics				
R^2	0.491		0.524		
F test value	114.567		86.841		
Sig	≤0.001		≤0.001		
Sig	Regression coefficients	Sig	Regression coefficients	Sig	
Management and operation ability	0.086	≤0.001	0.225	≤0.001	
Dynamic marketing capabilities	0.063	≤ 0.001	0.278	≤ 0.001	
Management and operation ability * dynamic marketing capabilities			0.074	0.007	

Table 7: Analysis of the adjustment effect of dynamic marketing capabilities (full marketing capabilities → sustainable competitive advantage).

	Model 1		Model 2		
	Model statistics	i	1,10001 2		
R^2	0.447		0.464		
F test value	96.226		68.270		
Sig	≤0.001		≤0.001		
	Regression coefficients	Sig	Regression coefficients	Sig	
Full marketing ability	0.061	≤0.001	0.209	≤0.001	
Dynamic marketing capabilities	0.051	≤0.001	0.270	≤0.001	
Full marketing ability * dynamic marketing capabilities			0.068	0.007	

organizational innovation. Dynamic technical capabilities can only have a direct impact on sustainable competitive advantage, and have a regulatory role between technical capabilities and sustainable competitive advantage. Figure 4 provides theoretical model for identifying core marketing capabilities of high-tech enterprises from the perspective of sustainable competitive advantage.

4. Discussion

With the development of economic integration and globalization, and the continuous acceleration of product and technology updates, the competition faced by high-tech enterprises is becoming more and more fierce, and it is more and more difficult for enterprises to obtain sustainable



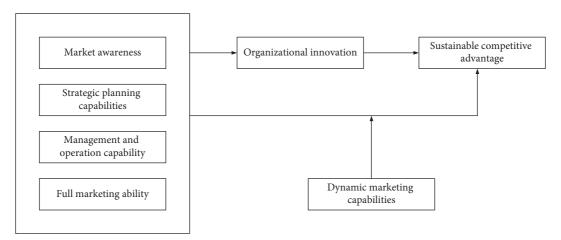


FIGURE 4: Theoretical model for identifying core marketing capabilities of high-tech enterprises from the perspective of sustainable competitive advantage (after revision).

competitive advantages. Identifying the core technical capabilities of high-tech companies can help companies grasp the ability to have the most positive effect on sustainable competitive advantage, and make full use of their own resources and capabilities to obtain sustainable competitive advantage. The empirical research results show that for high-tech enterprises, enterprises need to focus on building market cognitive ability, strategic planning ability, management operation ability, and full marketing ability, while the dynamic marketing capabilities require companies to make a reasonable allocation according to their own situation.

The direct impact of core technical capabilities on sustainable competitive advantage: (1) the market environment that high-tech companies are located has a high degree of uncertainty, in which market awareness can help them obtain detailed consumer and competitor information; (2) strategic planning capability seeks sustainable development for the enterprise through the formulation and execution of strategies; (3) members within the enterprise communicate and collaborate with each other to realize the benefits of the enterprise, and realize the ability of the enterprise to adapt to and adjust to the market under the effect of dynamic marketing capabilities, thereby helping the enterprise to form a sustainable competitive advantage. Therefore, hightech enterprises have the most direct and most significant impact on sustainable competitive advantage through market awareness, strategic planning, management and operation capabilities, full-person marketing capabilities, and dynamic marketing capabilities. This finding is also consistent with Davcik and Sharma (2016), Quaye and Mensah (2019), and Younis and Qureshi (2017), and dynamic marketing capabilities have a significant impact on sustainable competitive advantage [24-26].

Indirect impact of core technical capabilities on sustainable competitive advantage: the ability of strategic planning has the greatest impact on sustainable competition, because the organizational innovation of enterprises has great uncertainty and risk, which is more obvious in the turbulent market environment in which high-tech

enterprises are located. This explains the reason why strategic technological capabilities have the greatest impact on organizational innovation [27, 28]. The management of enterprises also has a significant impact on organizational innovation [29, 30]. The performance of enterprises formed by organizational innovation is getting higher and higher, and the competitive advantage is becoming more and more obvious; it can be seen that organizational innovation of enterprises inevitably has a significant impact on sustainable competitive advantage [31].

The high-tech enterprises are taken as the research object, and the relationship between technological capability, organizational innovation, and sustainable competitive advantage are studied. However, due to time, experience, and other factors, there are still some shortcomings and deficiencies: (1) on the basis of consulting the relevant literature, the rationality and universality of the measurement items of individual variables still need to be verified in future research and analysis, although these factors have passed the reliability and validity test in the process of empirical analysis. (2) The theoretical model of this study only analyzes the impact of four technological capabilities on organizational innovation and sustainable competitive advantage, and does not conduct in-depth analysis on the different levels of various technological capabilities. Whether different contents of various technical capabilities will have different degrees of impact on organizational innovation and sustainable competitive advantage will become a focus of future research.

5. Conclusions

Through consulting a large number of literatures on sustainable competition, combining with the characteristics of high-tech enterprises and deducing based on the theories of market, management, marketing, strategy, and organizational innovation, a theoretical model and related research assumptions are proposed to identify the core technological capabilities of high-tech enterprises. The methods of factor analysis, correlation analysis, and structural equations of 266

survey data of related companies are used to confirm the validity of the model and revise.

The research conclusion are as follows: high-tech enterprises' market cognition ability, strategic planning ability, management operation ability, all-person marketing ability, and dynamic marketing ability have a direct and positive impact on sustainable competitive advantage, and organizational innovation also has an indirect impact on sustainable competitive advantage. The degree of impact on the sustainable competitive advantage is in order of market cognition ability, strategic planning ability, management operation ability, full marketing ability, and dynamic marketing ability. Dynamic technical capabilities can enhance market cognitive ability, strategic planning ability, management and operation ability, all-person marketing ability, and dynamic marketing ability, and have a positive impact on sustainable competitive advantage.

At the theoretical level, the theoretical research on core technical capabilities is enriched, on the one hand, through comprehensive evaluation and analysis of relevant research on the existing technical capacity components, the core technical capacity components of high-tech enterprises are clarified. On the other hand, by sorting and analyzing existing models, summing up previous research results and related theories, in-depth analysis of the impact of technological capabilities on sustainable competitive advantage, and proposing a theoretical model to identify the core technical capabilities of enterprises from the perspective of sustainable competitive advantage to expand relevant research in this field. At the practical level, the intensified competitive environment has greatly affected the application of the company's core technical capabilities, the theoretical model established to identify the core technical capabilities of high-tech enterprises can help companies effectively identify the core technical capabilities that can form sustainable competitive advantages, and then build the core technical capabilities of enterprises to guide the direction.

Data Availability

The data used to support the findings of this study are available from the corresponding author upon request.

Conflicts of Interest

The authors declare that they have no conflicts of interest regarding the publication of this paper.

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