

Research on the Development Strategy of Museum Cultural and Creative Products

--A Case Study of the Overseas Chinese Transport History Museum

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Abstract

This study takes Overseas Chinese Transport History Museum as an example and uses the SWOT-Analytic Hierarchy Process Model to analyze the development strategy of the museum's Cultural and Creative Products. The research finds that Overseas Chinese Transport History Museum, as the only museum in China focused on overseas transportation, boasts a unique theme and extensive collections. However, limitations such as its restricted recognition and inadequate use of technology hinder the full development of Cultural and Creative Products. Amid opportunities presented by the Cultural Tourism Boom and favorable policies, Overseas Chinese Transport History Museum can adopt strategies like broadening product lines and strengthening brand promotion to effectively tackle challenges such as heightened competition and economic instability. By integrating SWOT analysis with the Analytic Hierarchy Process, this study offers specific strategic recommendations for optimizing the development of Cultural and Creative Products at Overseas Chinese Transport History Museum, aiming to drive the museum toward high-quality growth.

Keywords

Overseas Chinese Transport History Museum, Cultural and Creative Products, SWOT—Analytic Hierarchy Process model.

1. Introduction

The "Guiding Opinions on Further Optimizing the Development of Cultural and Creative Products" issued by the Ministry of Culture and Tourism encourages museums to develop products with cultural significance and market potential, leveraging their unique characteristics. It is recommended that museums deeply explore the essence of China's outstanding traditional culture, identifying, deconstructing, and reinterpreting the Chinese elements and symbols embedded in their collections. These elements should be seamlessly integrated into the creative design of Cultural and Creative Products, maximizing the role of museums in advancing Culture-Tourism Integration and promoting Cultural Consumption. New standards are thereby set for the development of museum Cultural and Creative Products^[1]. The Quanzhou Municipal Government supports the infrastructure development and Cultural and Creative Products initiatives of the Overseas Chinese Transport History Museum through dedicated funding and subsidy programs. In 2024, the government plans to allocate 5 million yuan for the museum's modernization upgrades and the enhancement of its Digital Display System. In this context, how the Overseas Chinese Transport History Museum can enhance its Cultural and Creative Products to meet consumer needs has become a pressing issue. To address this, the study employs methods such as literature review, case analysis, and

SWOT-AHP analysis to examine the current state and trends in museum Cultural and Creative Products development by consulting relevant academic resources^[2]. Through SWOT analysis, the strengths, weaknesses, opportunities, and threats of the Overseas Chinese Transport History Museum are identified. Combining the AHP Analytic Hierarchy Process, optimization strategies are proposed to improve consumer satisfaction with the museum's Cultural and Creative Products. This research provides valuable references for the design and development of Overseas Chinese Transport History Museum Cultural and Creative Products and supports the museum's transition toward high-quality development^[3].

2. Overseas Chinese Transport History Museum

2.1. Venue Introduction

Overseas Chinese Transport History Museum is located in Quanzhou City, Fujian Province, and stands as the first museum in China dedicated to the theme of overseas transportation. Historically, Quanzhou was a crucial starting point of the Maritime Silk Road and was renowned as the "Oriental Great Port." The museum highlights the illustrious history of Quanzhou as a key port on the ancient Maritime Silk Road, featuring an extensive collection of valuable artifacts and historical materials. These include ancient ship models, navigation tools, trade goods, and relics of cultural exchange. Among the main exhibits are models of Fuchuan ships from the Song and Yuan dynasties, ancient compasses, nautical charts, ceramics, spices, silk, and stone inscriptions, offering a comprehensive presentation of the achievements of ancient Chinese maritime transportation and Sino-foreign cultural exchanges. The museum includes exhibition halls such as the Maritime Silk Road Hall, the Ancient Navigation Technology Hall, the Quanzhou Port History Hall, and the Sino-Foreign Cultural Exchange Hall. Through physical displays, pictorial materials, and multimedia technology, it vividly illustrates Quanzhou's pivotal role in the history of ancient Chinese maritime transportation, serving as an essential window into understanding ancient Chinese maritime activities and Sino-foreign cultural interactions.

2.2. Overseas Chinese Transport History Museum Cultural and Creative Products Current Status

Museum cultural and creative products involve the creative design and transformation of elements such as museum collections, symbolic signs, and distinctive cultural features. This process fully utilizes the unique advantages of museums to offer consumers tangible or intangible products with commercial value. While meeting consumers' functional needs, these products also address their spiritual demands, deepening their understanding of history and culture. The goal is to provide value-added services to consumers and actively contribute to the preservation and promotion of traditional culture^[4].

Since the Chinese Museums Association released the "Initiative on Strengthening the Development of Museum Cultural Products" and the State Council announced the "Museum Regulations," museums have been encouraged to tap into their cultural resources, unlock their inherent value, and develop Cultural and Creative Products, thereby integrating traditional culture with modern life^[5]. The Overseas Chinese Transport History Museum has significantly increased its efforts in creating Cultural and Creative Products, leading to a diverse range of museum products that have played an active role in promoting and preserving traditional culture. Currently, the market features a wide variety of Overseas Chinese Transport History Museum Cultural and Creative Products, including souvenirs, cultural derivatives, educational tools, and digital offerings. Souvenirs such as ancient maritime models, bookmarks, postcards, and T-shirts are available; cultural derivatives include ancient nautical chart posters, historical figure posters, and cultural puzzles; educational products consist of science books, puzzles, and model kits designed for audiences of different age groups; digital products encompass virtual

tour apps and electronic photo collections. Although the Overseas Chinese Transport History Museum Cultural and Creative Products have developed over decades and made significant progress in both form and scale, under the backdrop of Culture-Tourism Integration, the rapid advancement of China's cultural and creative product design and the growing demand for cultural experiences have highlighted certain shortcomings in their current development^[6]. These deficiencies are primarily reflected in the following areas: first, excessive imitation in form, resulting in serious homogenization and insufficient uniqueness of the museum itself; second, limited functional adaptability, with inadequate alignment to the needs of modern life; third, insufficient creativity in design, a lack of leadership in showcasing the cultural value of overseas transportation history, and incomplete expression of cultural depth.

3. Overseas Chinese Transport History Museum Cultural and Creative Products Development SWOT Analysis

3.1. Strengths

3.1.1. Unique Theme

Overseas Chinese Transport History Museum stands as the only museum in the country dedicated to overseas transportation, offering a unique and exclusive focus that has drawn significant interest from audiences passionate about maritime history and culture.

3.1.2. Extensive Collections

The museum boasts an extensive collection of precious artifacts, documents, and images, with exhibits rich in content that comprehensively present China's overseas transportation history from ancient times to the modern era.

3.1.3. Geographical Advantages

Situated in Quanzhou, a city celebrated for its historical and cultural heritage, the museum benefits from the region's abundant resources as a key historical port, further enhancing its appeal.

3.1.4. Academic Support

Through collaborations with multiple universities and research institutions, the museum engages in in-depth academic research and exchange activities, steadily strengthening its academic influence and providing a robust cultural and historical foundation for Cultural and Creative Products development.

3.2. Weaknesses

3.2.1. Limited Recognition

In comparison to some renowned historical museums, Overseas Chinese Transport History Museum remains less widely recognized, highlighting the need for enhanced promotional efforts to boost public awareness.

3.2.2. Insufficient Funding

The museum faces constraints due to limited funding for operations and expansion, which has slowed its development pace and scale, thereby restricting the launch of more innovative projects and activities.

3.2.3. Inadequate Technological

Application Shortcomings in digital displays and interactive experiences call for improved technological integration to enhance visitor engagement and interactivity.

3.2.4. Limited Audience

Base With a primary focus on attracting niche interest groups, the museum’s audience remains relatively narrow. Diversified activities and exhibitions are needed to draw a broader range of visitors and expand its audience base.

3.3. Opportunities

3.3.1. Cultural Tourism

Boom The rise of cultural tourism is bringing more visitors to museums, creating a favorable market environment for the development of Cultural and Creative Products and enhancing their influence and economic benefits.

3.3.2. Policy Support

The state’s emphasis on the cultural industry, along with supportive policies, provides museums with strong policy guarantees, including tax incentives, financial subsidies, and funding for cultural projects.

3.3.3. Technological Advancements

Advances in digital and intelligent technologies are presenting new opportunities for the development of Cultural and Creative Products, allowing for increased product value and improved audience experiences through innovative solutions.

3.3.4. Cross-Border Collaboration

By collaborating with other cultural institutions and enterprises, museums can develop diverse Cultural and Creative Products, expand their market influence and brand recognition, and establish mutually beneficial partnerships.

3.4. Threats

3.4.1. Intensified Competition

Growing competition from other museums and cultural venues risks diverting potential audiences and markets, which could reduce visitor numbers and impact sales of Cultural and Creative Products.

3.4.2. Economic Fluctuations

Uncertainty in the economic environment may affect the sales of Cultural and Creative Products. During economic downturns, consumers’ purchasing power and willingness to spend are likely to decline.

3.4.3. Intellectual Property Issues

Copyright and intellectual property challenges in the development of Cultural and Creative Products necessitate careful attention to legal risks and rights protection to safeguard the museum’s reputation and long-term growth.

Table 1: Breakdown of SWOT Content

Strengths (S)	A unique theme	Extensive collections	A geographical advantage	Academic support
Weaknesses (W)	Limited recognition	Inadequate funding	Insufficient technological application	A small audience base
Opportunities (O)	Cultural Tourism Boom	Policy support	Advancements in technology	Cross-sector collaboration
Threats (T)	Intensified competition property challenges	Economic fluctuations	Intellectual	

4. Analysis Based on the SWOT-AHP Model

The Analytic Hierarchy Process (AHP) is a decision analysis method that integrates qualitative and quantitative approaches and is characterized by its systematic and hierarchical nature. It was developed by the American operations researcher Thomas L. Saaty^[7]. Combining the SWOT analysis method with the Analytic Hierarchy Process for comprehensive analysis allows for the effective utilization of the strengths of both approaches, thereby enhancing the adaptability of the analysis results^[8].

4.1. Establishment of the Hierarchical Structure Model

The analysis results of the strengths, weaknesses, opportunities, and challenges of developing Overseas Chinese Transport History Museum Cultural and Creative Products are systematically compared and organized to establish a three-level framework consisting of the goal level, criterion level, and indicator level. The resulting Hierarchical Structure Model is presented in Figure 1^[9].

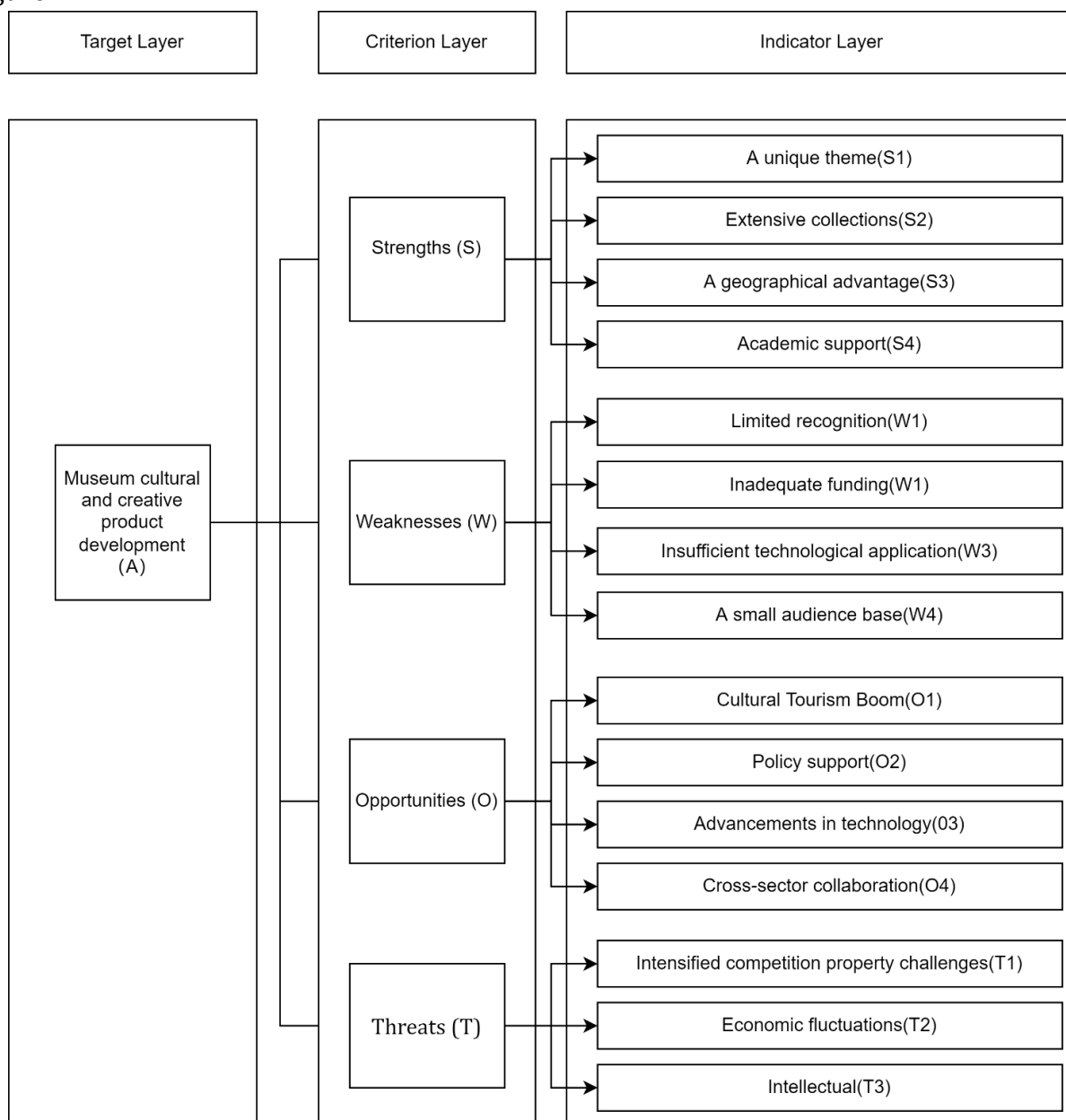


Figure 1: TSWOT Analysis Hierarchical Structure Model

4.2. Construction of the Comparison Judgment Matrix

Experts in relevant fields are invited to evaluate the relative importance of each index according to the scale of relative importance, (see Table 2), forming a comparison matrix^[10]. The two standards being compared are represented by factor i and factor j in the table, with the scale a_{ij} as elements constituting the comparison matrix.

Table 2: Scale of Importance Scale Meaning

Scale	Meaning
1	The two factors are equally important
3	The former is slightly more important than the latter
5	The former is significantly more important than the latter
7	The former is strongly more important than the latter
9	The former is extremely more important than the latter
2、4、6、8	Intermediate values between two adjacent judgments
Reciprocal	If the importance ratio of factor i to j is a_{ij} , then the importance ratio of factor j to i is $a_{ji}=1/a_{ij}$

4.3. Weight Calculation

The importance of the SWOT-AHP hierarchy model’s criterion layer relative to the goal layer is compared pairwise, and the corresponding weights are calculated to obtain the judgment matrix for the Overseas Chinese Transport History Museum Cultural and Creative Products development strategy group. Each index under every criterion layer is compared pairwise to calculate the corresponding weights, yielding judgment matrices for the strengths group, weaknesses group, opportunities group, and challenges group respectively. The formula $CR=CI/RI$ is used for Consistency Test; if $CR<0.1$, the calculation result is valid; otherwise, it is invalid and requires adjustment before retesting. Through consultation with 10 industry experts, scoring and statistical analysis were conducted on the 15 criteria in the SWOT analysis of Overseas Chinese Transport History Museum Cultural and Creative Products development. Using the Analytic Hierarchy Process, the corresponding weights were calculated, resulting in a total of five relative importance judgment matrices, see Tables 3-7.

Table 3: Cultural and Creative Products Development judgment matrix

Index	S	W	O	T	W
S	1	5	2	3	0.4717
W	1/5	1	1/3	2	0.1218
O	1/2	3	1	4	0.3154
T	1/3	1/2	1/4	1	0.0911

Table 4: Comparison Matrix of Advantages

Index	S1	S2	S3	S4	W1
S1	1	3	6	4	0.5417
S2	1/3	1	4	3	0.2630
S3	1/6	1/4	1	1/3	0.0638
S4	1/4	1/3	3	1	0.1315

Table 5: Comparison Matrix of Disadvantages

Index	W1	W2	W3	W4	W2
W1	1	2	1	3	0.3482
W2	1/2	1	2	4	0.3147
W3	1	1/2	1	3	0.2463
W4	1/3	1/4	1/3	1	0.0908

Table 6: Opportunity Comparison Judgment Matrix

Index	O1	O2	O3	O4	W3
O1	1	1/2	1	3	0.2391
O2	2	1	2	4	0.3463
O3	1	1/2	1	3	0.2391
O4	1/3	1/4	1/3	1	0.0890

Table 7: Challenge Comparison Judgment Matrix

Index	T1	T2	T3	W4
T1	1	3	5	0.6370
T2	1/3	1	3	0.2583
T3	1/5	1/3	1	0.1047

By combining the Weight Vector of inter-group SWOT factors with the Weight Vector of four intra-group SWOT factors, the weight values of each factor relative to the goal layer are calculated, yielding the overall hierarchical ranking presented in the table, see Table 8. It is concluded that the greatest strength for the development of Overseas Chinese Transport History Museum Cultural and Creative Products lies in its unique theme (S1), the most significant weakness is its limited recognition (W1), the most prominent opportunity is the rise of the Cultural Tourism Boom (O1), and the most pressing challenge is increasing competition (T1).

Table 8: Indicator Weight

Criterion Layer	Criterion Layer Weight	Index Layer	Index Layer Weight	Comprehensive Weight
Strengths (S)	0.4717	A unique theme	0.5417	0.2555
		Extensive collections	0.2630	0.1241
		A geographical advantage	0.0638	0.0301
		Academic support	0.1315	0.0620
Weaknesses (W)	0.1218	Limited recognition	0.3482	0.0424
		Inadequate funding	0.3147	0.0383
		Insufficient technological application	0.2463	0.0300

		A small audience base	0.0908	0.0111
Opportunities (O)	0.3154	Cultural Tourism Boom	0.3463	0.1092
		Policy support	0.2391	0.0754
		Advancements in technology	0.2391	0.0754
		Cross-sector collaboration	0.0890	0.0281
Threats (T)	0.0911	Intensified competition property challenges	0.6370	0.0580
		Economic fluctuations	0.2583	0.0235
		Intellectual	0.1047	0.0095

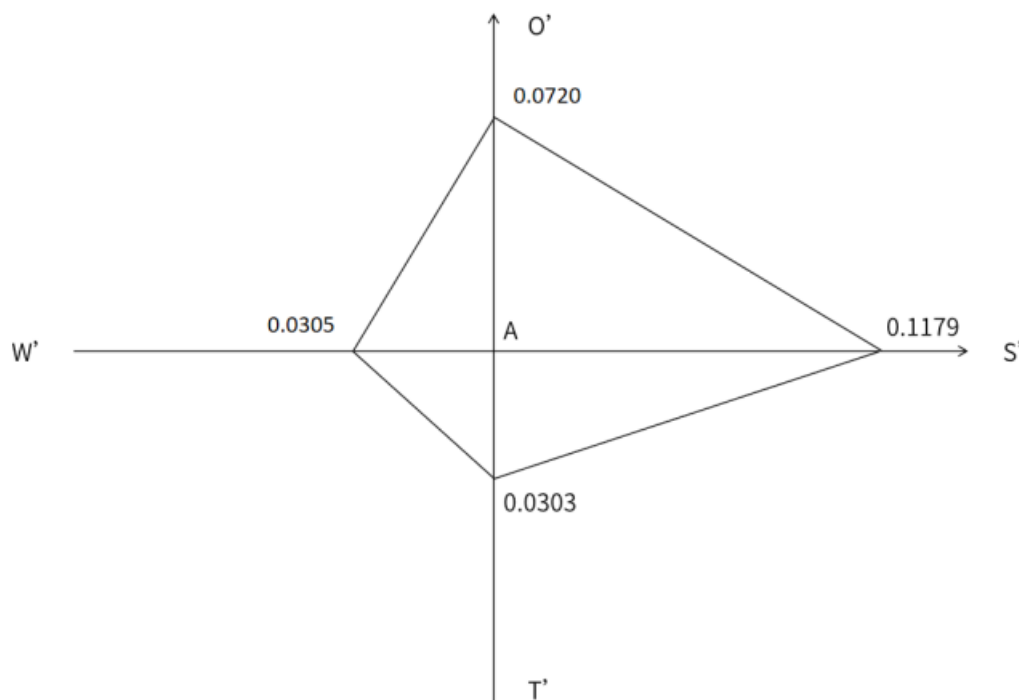


Figure 2: SWOT Strategic Quadrant

4.4. Weight Calculation Four-Quadrant Analysis

The development strategy for cultural and creative products at the Overseas Chinese Transport History Museum is shaped by the combined influence of strengths, weaknesses, opportunities, and challenges. These four variables are used as semi-coordinate axes, with points S' , W' , O' , and T' representing overall strength, overall weakness, overall opportunity, and overall challenge levels, respectively. These points are calculated based on the average value of the sum of comprehensive weights of each indicator. Using the results from the Analytic Hierarchy Process (AHP) analysis, a SWOT-AHP model is constructed to guide the selection of the museum’s cultural and creative product development strategy through four-quadrant analysis. The areas of the four triangles within the quadrant are as follows:

$$S\Delta SAO=(0.1179\times 0.0720)/2=0.0042,$$

$$S\Delta OAW=(0.0720\times 0.0305)/2=0.0011,$$

$$S\Delta WAT=(0.0305\times 0.0303)/2=0.0005,$$

$$S\Delta SAT=(0.1179\times 0.0303)/2=0.0018.$$

It follows that $S\Delta SAO > S\Delta OAW > S\Delta SAT > S\Delta WAT$, see Figure 2. Therefore, the Overseas Chinese Transport History Museum should prioritize the adoption of the Strength-Opportunity Strategy in the development of Cultural and Creative Products. In future development, it is crucial to fully maintain and leverage its strengths, capitalize on external opportunities, continuously address weaknesses, effectively respond to various challenges, and promote the healthy growth of the cultural and creative industries.

5. Development Strategies for Cultural and Creative Products Based on SWOT analysis

5.1. Product Diversification Strategy

Product lines should be expanded by increasing the variety of offerings to meet the needs of different consumers. Museums can develop a wider range of souvenirs, practical items, and art derivatives^[11]. For example, in addition to existing navigation models, replicas of ancient navigational instruments and maritime maps could also be introduced.

Cultural resources from museums should be integrated with modern design to create Cultural and Creative Products that are both culturally rich and aligned with contemporary aesthetics. Collaborations with contemporary artists and designers can lead to the launch of limited-edition cultural products, such as art posters and cultural apparel, which are likely to attract more young consumers.

5.2. Brand Promotion Strategy

Various promotional channels should be utilized to enhance the museum's brand awareness, including traditional media (e.g., newspapers, television), new media platforms (e.g., WeChat Official Accounts, Weibo, Douyin), and the museum's official website. Publishing details about museum exhibitions, descriptions of Cultural and Creative Products, and engaging cultural stories will help capture public attention. Cultural events and themed exhibitions, such as product launches for Cultural and Creative Products, cultural lectures, and interactive experiences, should be organized regularly to boost audience engagement and interaction, thereby strengthening brand influence. Additionally, combining online and offline approaches will further expand the reach and impact of these activities.

5.3. Technology Application Strategies

Digital Display. AR/VR technology is utilized to create virtual museums, enabling audiences to immerse themselves in museum exhibitions through smartphones or computers^[12]. Interactive guide apps are developed to offer multilingual commentary, 3D displays, and interactive games, enhancing the overall visitor experience. Online Sales Platforms. The museum's e-commerce platforms are built and optimized, with cultural and creative products sold through official websites and major e-commerce platforms such as Taobao and JD.com. Social media and live streaming platforms are used for product promotion and sales, boosting interactivity and user engagement.

5.4. Win-Win Cooperation Strategies

Cross-Border Collaboration. Partnerships are formed with other cultural institutions, enterprises, and brands to develop co-branded cultural and creative products, thereby expanding market influence. Collaborations with renowned designers and artists result in the

launch of co-branded products, attracting a broader consumer base. University-Enterprise Collaboration. Universities are partnered with to leverage their research and design resources for the development of innovative cultural and creative products. Student design competitions and innovation projects are organized to inspire creativity and enthusiasm among young people, nurturing future talent in the cultural and creative industries.

5.5. Education and Experience Strategies

Educational Products. A range of educational cultural and creative products is developed for different age groups, including popular science books, educational toys, and teaching software. These products are used to disseminate maritime history and cultural knowledge to the public, particularly teenagers, reinforcing the museum's educational role. **Experience-Oriented Products.** Highly interactive experiential products, such as DIY model kits and cultural experience courses, are designed. Through hands-on activities and participation in cultural events, audiences are able to deepen their understanding of and interest in museum culture.

5.6. Fundraising Strategies

Diversified financing is employed by raising funds through various means, including government grants, corporate sponsorships, and crowdfunding, to support the research, development, and promotion of Cultural and Creative Products. Efforts are actively made to secure cultural industry support policies and funds, while applications for special funds and subsidies are pursued.

Self-sustaining capabilities are achieved by developing high value-added Cultural and Creative Products and boosting product sales. Incentive mechanisms for the sales of Cultural and Creative Products are established to enhance team motivation and creativity, ensuring continuous innovation and market competitiveness of these products^[1].

These strategies will enable Overseas Chinese Transport History Museum to fully leverage its strengths, overcome weaknesses, seize market opportunities, address external threats, and achieve a win-win outcome in cultural dissemination and economic benefits^[14].

6. Conclusion

This study provides profound insights and practical recommendations for the future development of Overseas Chinese Transport History Museum through an analysis of its Cultural and Creative Products development strategies. In the current environment of rising cultural tourism and policy support, Overseas Chinese Transport History Museum faces both opportunities and challenges. By applying the SWOT-[[[T_Analytic Hierarchy Process Model]]], this research thoroughly reveals the museum's strengths and weaknesses in areas such as thematic uniqueness, recognition, and technological application, offering targeted strategic options for museum managers. It is recommended that Overseas Chinese Transport History Museum strengthen cooperation with the cultural and creative industries, enhance brand influence, and improve product innovation capabilities to respond to market competition and changes. The ultimate goal is to establish Overseas Chinese Transport History Museum as an internationally renowned cultural tourism destination through the optimization and innovation of cultural products, providing audiences with deep and diversified cultural experiences.

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