# SWOT Analysis of National Cultural Resources based on Data Analysis 

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#### Abstract

: The rapid development of network and media technology has led to cultural exchange more frequently. To achieve the in-depth excavation of the connotation of national cultural resources, the rational development and utilization of resources and the cultivation of awareness of resource protection. There is an urgent need for a comprehensive analysis of the development of cultural resources. Against such a background, this paper takes the development of national cultural resources as the research object. Firstly, CiteSpace was used to visually analyze 1104 valid literature data related to national cultural resources, the current research status of national cultural resources is summarized. Further analysis based on visual analysis using the SWOT model, list the internal strengths, weaknesses and external opportunities and threats in resource development in a rectangular format, and put forward the SWOT model of the development of national cultural resources. Analysis of the elements in the SWOT matrix, and some suggestions are put forward to improve the development mechanism of national cultural resources, it provides theoretical guidance for the development and sharing of national cultural resources in the future.


Keywords: National cultural resources; Data analysis; Data visualization; SWOT analysis

## 1 INTRODUCTION

Influenced by the geographical environment, regional policies and other conditions, a unique culture has formed. National cultural resources are an objective reflection of the national culture. They are among the national cultures that can be exploited and utilized by people, then it is transformed into the sum of the material and spiritual national culture of cultural products, cultural commodities, and cultural consumer goods [7]. The analysis of national cultural resources is multifaceted. At the technical level, enabling technological empowerment and protecting national cultural resources by "digitization". Digital technology is used to provide protection, inheritance, display, product operation services, and demonstration applications, forming a new service model of cultural resources [9] [12]. Media enrich the communication form of resources, making the intangible national culture visible and situational, and reproducing the contents of minority culture [8]. The digital class- room transforms cultural resources into teaching resources, transforms tacit knowledge into explicit knowledge, and supports practical teaching active- ties [4]. At present, the problems existing in the development of national cultural resources make the
national culture gradually lose its authenticity, and traditional culture gradually separated from modern culture.

## 2 DATA SOURCES AND TOOLS

Big data, artificial intelligence, knowledge graph, and resource recommendation technologies have been widely used in cultural resource development research. This paper is based on CiteSpace visual analysis tool and CNKI database, searching in CNKI with "national cultural resources" and "national culture" as keywords, and Chinese literature is limited to the period of 20102021. A total of 1214 papers were searched, the obtained literature was screened and 1104 valid kinds of literature were obtained. The filtered literature data is downloaded and imported into CiteSpace for visual analysis. Further analysis of national cultural resources based on visual analysis results combined with SWOT analysis, The SWOT model for the development of national cultural resources is proposed. In order to provide reference for the development and research of national cultural resources in the future.

## 3 TREND ANALYSIS

### 3.1 Annual Publication Volume

According to the year of publication, the distribution of journal papers in this research field in CNKI is counted, and the number of papers published in this research field
in a specific period is obtained, as shown in Figure 1. As can be seen from the figure, publications on national cultural resources show a downward trend from 2010 to 2012 but started to rebound again from2012 to 2013. Since 2013, publications have shown a slow downward trend. However, it can be seen that researchers have not stopped in research on national cultural resources, but have continued to advance in their exploration.


Figure 1 Trend in the number of articles issued

### 3.2 Keyword Frequency Analysis

Literature data is imported into CiteSpace, and keyword frequency and year of the first occurrence are counted, as shown in Table 1. As can be seen in Table 1, The keywords appearing in descending order are "national culture", "national cultural resources", "cultural resources", "cultural industry", "minority culture", etc. In addition, the keywords of "cultural tourism resources" also appeared. It can be concluded that the research on cultural resources is not limited to the research on cultural resources themselves, Instead, it is constantly considering combining national cultural resources with other industries, such as tourism. Cultural and related industries are being developed and innovated.
Table1: Keyword statistics of national cultural resources

| Keywords | Count | Centrality | Year |
| :--- | :--- | :---: | :---: |
| National cultural | 230 | 0.42 | 2010 |
| National cultural <br> resources | 198 | 0.61 | 2010 |
| Cultural resources | 74 | 0.28 | 2010 |
| Culture industry | 67 | 0.15 | 2010 |
| Minority culture | 54 | 0.18 | 2010 |
| Minority | 47 | 0.15 | 2011 |
| Development | 42 | 0.10 | 2010 |
| National cultural industry | 34 | 0.11 | 2010 |
| Minority cultural <br> resources | 34 | 0.10 | 2010 |
| Tourism resources | 34 | 0.09 | 2010 |
| Ethnic cultural tourism <br> resources | 29 | 0.03 | 2010 |
| Ethnic cultural tourism | 27 | 0.04 | 2010 |

### 3.3 Research Hotspot Analysis

Figure 2 is a cluster map of the research field of national cultural resources development. According to Figure 2, this study divides the research hotspots into the following three parts according to the clustering results. (1) Combining with curriculum brings education value. Combining knowledge of national culture with teaching will enable students to develop a long-term mechanism for respecting the national culture and actively spreading traditional culture. The position of national culture in teaching has been promoted. Therefore, the two clusters of "\#6 development" and "\#8 cultural inheritance and innovation" are summarized as the exploration of the educational value of ethnic cultural resources. (2) Comprehensive analysis is the basis and premise of managing and excavating the deep value of resources and guides the formation of a new model. Therefore, the four clusters of "\#0 national cultural resources", "\#1 national culture", "\#4 national culture" and "\#5 culture" are summarized as an analysis of the meaning, mode and development status of national cultural resources. (3) Fully tap the advantages of cultural resources. Combining it with different industries to form different cultural products and services. Promote the common development of economy, society and related industries. Therefore, the cluster of "\#2 national cultural industry" is summarized as the pursuit of the combination of cultural resources and tourism and other industries to promote economic and social development.


Figure2: Keyword clustering results of national cultural resources

## 4 SWOT ANALYSIS

### 4.1 SWOT Model of National Cultural Resources Development

The SWOT analysis method is also called the situation analysis method. Through the survey, the strengths (S), weaknesses (W), opportunities (O) and threats ( $\mathrm{T)} \mathrm{related} \mathrm{to} \mathrm{the} \mathrm{research} \mathrm{object} \mathrm{are} \mathrm{listed} \mathrm{in}$ matrix form. The author according to the characteristics of resources and SWOT analysis, and proposing a SWOT model of the development of national cultural resources, as shown in Figure 3. The idea of system analysis is used to match the factors with each other and draw the corresponding decision-making conclusions.


Figure 3: SWOT model of national cultural resources development

The purpose of this paper is to analyze the national cultural resources effectively to solve the existing problems. Therefore, the author takes the development of national cultural resources as the research object, a Systematic, comprehensive analysis of the research object using the proposed SWOT model of national cultural resource development combined with CiteSpace visualization results. Then, based on the results of the analysis, the corresponding strategic recommendations are formulated.

### 4.2 SWOT Analysis

Strengths: national culture is unique and rich, revealing the spirit of ethnic minorities. A unique and
original national culture can truly and objectively reflect a nation's historical development level and spiritual temperament. National cultural resources are combined with tourism and other industries to promote the joint development of culture, economy and other industries. Implementing the "Culture + " strategy, and promoting substantive and in-depth integration of the cultural industry with tourism, science and technology, finance, and other industries to achieve mutual benefit and winwin results [1]. The value of cultural resources is fully reflected. Educating value enrichment to promote the transmission and development of national culture. combining national cultural resources with class- room teaching, it can influence learners' thoughts and behaviors, which is of great significance and value [5]. The cultural resource and curriculum integration enriches the educational value of national cultural resources.

Weaknesses: the resource development and utilization lack innovative thinking. Cultural resources are rich and diverse. Single development mode, simple product form, lack of attraction, and creative- ty are the normal conditions of resource development at present. The application of technology is limited, and the digital level needs to be improved. The combination of national culture and network technology should be constantly updated and improved, letting the national cultural resources develop in a more professional and popular digital direction. The financial and policy support is insufficient. The development of cultural resources is slow and time-consuming work. In terms of policy, the policy was not implemented in place and the leading role of the government was not fully played.

Opportunities: the development of national cultural resources to meet the needs of quality education. With the continuous progress of science and techno- logy, the requirements for quality education are constantly improving. Quality education strives to promote the comprehensive and comprehensive development of learners. The purpose of national culture education is to let students inherit and learn the excellent national culture, and develop their abilities. The development of the times and national culture are inseparable. The thought of socialism with Chinese characteristics for a new era emphasizes the need to strengthen cultural confidence and promote the prosperity of socialist culture [2]. The development of cultural resources should be by the development of the times. Effective integration of the excellent traditional culture of the Chinese nation with the core socialist values [3].

Threats: the awareness of protection is weak, and the relationship between economic development and the development of national cultural resources cannot be handled correctly. Influenced by modern culture, cultural resources gradually lose authenticity and integrity. The heritage is in a quandary. With the rapid development of the market economy and the yearning for a better life, the
phenomenon of urbanization is becoming more and more common, making some cultural carriers that rely on the original living environment and production methods gradually disappear [10]. There are multiple data types and storage is disorderly. National cultural resources are characterized by richness, diversity, and dispersion, which makes the collection and arrangement difficult. Traditional storage methods still have problems such as disorder, difficulty in finding, easy loss, and poor sharing.

## 5 COUNTERMEASURES AND SUGGESTIONS

Applying the SWOT model to analyze and summarize the strengths, weaknesses, opportunities and threats of the development of national cultural resources, SO strategy, WO strategy, ST strategy and WT strategy are proposed, as shown in Table 2.

Table 2: SWOT analysis of the development of national cultural resources

|  |  | Opportunities ( O ) | Threats ( T ) |
| :---: | :---: | :---: | :---: |
|  |  | The development of national cultural resources <br> to meet the needs of quality education <br> The development of the times and national culture are inseparable | The awareness of protection is weak, and the relationship between economic development and the development of national cultural resources cannot be handled correctly <br> The heritage is in a quandary There are multiple data types and storage is disorderly |
| Strengths <br> (S ) | National culture is unique and rich, revealing the spirit of ethnic minorities <br> National cultural resources are combined with tourism and other industries to promote the joint development of culture, economy and other industries <br> Educating value enrichment to promote the transmission and development of national culture | SO strategy | ST strategy |
|  |  | Giving full play to the particularrity of cultural resources and binding them with different industries to form a new model of synergistic development <br> Creating a quality curriculum of national culture to enhance the level of national quality education | Raising awareness of resource protection and making rational use of national cultural resources <br> Strengthening national culture education and promoting cultural transmission and development The relationship between the supply and demand of national cultural resources should be wellcoordinated |
| Weaknesses <br> ( W ) | The resource development and utilization lack innovative thinking The application of technology is limit- ed, and the digital level needs to be improved <br> The financial and policy support is insufficient | WO strategy | WT strategy |
|  |  | Strengthening the understanding of the connotation of national cultural resources and emphasizing the use of innovative thinking Strengthening the cultivation of compound talents | Enhancing digital construction Effective and reasonable storage of resources. <br> Systematic planning, following objective laws |


|  |  | Establishing and improving <br> cultural resources funding <br> and policy guarantee <br> mechanisms |  |
| :--- | :--- | :---: | :--- |

### 5.1 SO Strategy

Giving full play to the particularity of cultural resources and binding them with different industries to form a new model of synergistic development. Studying the resource development mode, more informative development paths and suggestions are presented. More first-class cultural works and products are created and applied in different industries, achieve synergy between national culture and different industries. Creating a quality curriculum of national culture to enhance the level of national quality education. The reform of the educational system makes the curriculum diversified. Computer technologies such as online learning, artificial intelligence, big data and cloud computing are used to design and develop high quality ethnocultural courses. Promoting national cultural resources into teaching materials, campuses and class- rooms, and gradually form a chain of school and social inheritance [11].

### 5.2 ST Strategy

Raising awareness of resource protection and making rational use of national cultural resources. Vigorously cultivating talents in the inheritance and sharing of national culture. The awareness of resource protection has been deepened. Strengthening national culture education and promoting cultural transmission and development. Taking advantage of the network media and distance education, multi- media resources, etc. are used for culture training and education. Furthermore, the popularization of national cultural Knowledge can be increased through newspapers, radio, television, films, and books. The relationship between the supply and demand of national cultural resources should be well coordinated. The development and utilization of national culture should be adapted to the needs of human society. The blind development of meaning- less resource products will only lead to the waste of human, material, financial and resources. Coordinating the supply and demand of resources, and maximizing the development value of resources.

### 5.3 WO Strategy

Strengthening the understanding of the connotation of national cultural resources and emphasizing the use of innovative thinking. A deep understanding of the connotation of resources is helpful to improve the effectiveness of the dissemination of cultural resources.

Effective application of innovative thinking, innovative cultural products and commodities with rich content and diverse forms have been developed with technological innovation ideas, making cultural learning immersive and experiential. Strengthening the cultivation of compound talents. The development of resources has been strengthened to build a scientific and perfect framework for the development of national cultural resources. It is necessary to strengthen technological innovation and the cultivation of compound talents to meet the needs of resource development. Establishing and improving cultural resources funding and policy guarantee mechanisms. Increasing government fun- ding, and special funds for national culture preservation were established. Propaganda of cultural resources using network media strives to obtain donations from enterprises, social organizations, individuals, and relevant departments. Systematic synergistic operationalization of policy measures is emphasized.

### 5.4 WT Strategy

Enhancing digital construction. Modern technological tools such as audio, video, and digital multimedia are used to provide an authentic, systematic and comprehensive record of ethnic cultural resources, and digitization of cultural content resources is promoted [6]. Resource Recommendation Technology and online learning are applied to the digital construction of cultural resources. Effective and reasonable storage of resources. There are two ways to rationalize storage resources: integration resources and storage. The organization system is established to classify and store resources. The storage consolidation model is proposed to promote the orderly and efficient storage of resources. Systematic planning, following objective laws. Cultural resources are the fusion of various elements, which forces resource development to be guided by a systems approach. Systematic development and learning of resources under the principle of following objective laws. The systematic methods make resource development more efficient.

## 6 CONCLUSION

The ideological spirit and value pursuit contained in the national cultural resources have a very great role and value in the development of human society. There are many problems in the process of resource development, analyzing and solving problems is the premise of effective resource development in the future. In this paper, Firstly, CiteSpace was used to visualize and analyze the
literature data on national cultural resources. Then the SWOT model of national cultural resources development is used to further analyze. The strengths, weaknesses, opportunities and threats in the development of national cultural resources are listed and formed in a SWOT matrix. In the SWOT matrix, SO strategy, ST strategy, WO strategy and WT strategy for the development of national cultural resources are proposed based on the results of the SWOT content analysis. A comprehensive analysis of national cultural resources can make us realize the problems, strategies are proposed, systematic planning, scientific development, and the vitality and charm of traditional culture are continued. Meanwhile, there are still some shortcomings in this paper. The analysis method is single, only SWOT analysis and CiteSpace analysis were applied and have limitations. In future research, trying to combine different methods and more information technology to conduct a comprehensive and detailed analysis of resource development, increasing the authority of the analysis results. It provides more sufficient theoretical support for the follow-up resource development.

## REFERENCES

[1] Cao Yongping. Turn the advantages of national cultural resources into new advantages for economic development [J]. Practice (ideological and theoretical Edition), 2020(01):53-54.
[2] Communist Party Member Network. Xi Jinping, To build a moderately prosperous society to seize the great victory of socialism with Chinese characteristics in the new era -Report at the 19th National Congress of the Communist Party of China [EB/OL] 2017-10-27]. https://www.12371.cn/2017/10/27/ARTI15091036 56574313.shtml.
[3] Feng Fangfang. Research on the development and utilization of ethnic cultural resources in comprehensive practical activity curriculum[D]. Guanxi Normal University,2021.
[4] Li Guobing. Resource database construction and application on national cultural inheritance and innovation: Taking" Baigonglu" as an example[J]. Decorate, 2021, (05):132-133.
[5] Liu Lianjun. Research on the educational value of Zhuang's excellent traditional culture colleges and universities[D]. Guangxi Normal University,2020.
[6] Qi Yali, Shen Qiming. Exploration of digital protection and development of national costume resources-Take the construction of the "Zhuang costume culture database" as an example [J]. Academic Forum, 2014, 37(10):123-127.
[7] Qin Huiduo, Fan Jianhua. The argumentation over the principles and patterns of the development and utilization of national culture resources[J]. Journal of Chinese Culture,2021(02):114-124+158-159.
[8] Ren Yanyan. Research on the construction of digital resources of national culture in Southern Guizhou[J]. Computer Knowledge and Technology, 2019, 15(33): 229-230.
[9] Wang Yuanlun. Research on digital protection and development of historical and cultural resources in Penglai city[J]. Humanistic World,2017(07):37-41.
[10] Wu Shangli. Research on the development of ethnic minority cultural resources[J]. Songs Bimonthly, 2019 (02):89-92.
[11] Xue Wenyan. Research on the protection of ethnic cultural resources in the Yinshan area from the perspective of cultural ecology[J]. Jingu Creative Literature,2021(41):124-125.
[12] Yao Weijun. Cultural Resources[M]. Beijing: Tsinghua University Press,2015.

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