Visualization of the Frontier Evolution of Strategic Management Based on Knowledge Map

Fanyoujun
Macau Polytechnic Institute, Macao, 519000

Abstract: Over the past 20 years, western strategic management has developed rapidly. In the new century, strategic management is becoming more and more contentious. It not only pays attention to solving the problems of traditional strategic management, but also explores the Enlightenment of the "new scientific group" theory and the importance of strategic decision-making. It is only sooner or later that a new breakthrough will be made. CiteSpace software is used to visualize the relevant literature data since 2000, and the frontier and evolution of strategic management are discussed. Through the analysis of the key words of relevant domestic research, the author puts forward the research focus and the most concerned keywords and the authors and literature contents with high frequency of reference in each stage of domestic research, so as to present the research of domestic strategic emerging industries. Several features. It is necessary to provide necessary reference for scientific research planning and management in the same field in China.

1. Introduction
The knowledge map is a graph showing the relationship between the development process and structure of scientific knowledge. It visualizes the most compelling frontier areas of knowledge and information with visual images [1]. With the advancement of social informatization and the increasing use of network, information sources are becoming more and more huge, and the demand for storage, transmission, retrieval and classification of large data and even massive data is increasingly urgent. Information visualization "is not only a computer method, but also a process; specifically, transforming information into a visual form [2]. Strategic management has great influence on various social sciences and its influence on business management activities. Force has become one of the most promising disciplines within the framework of the current business management discipline system. Under the background of great changes in market demand, technological paradigm and management concept, in the early 1990s, a new business model and management theory of virtual management emerged, and it quickly gained wide attention from the theoretical and industrial circles [3]. Talent demand replaces the demand for funds and resources, social and cultural functions are strengthened, the working methods of enterprises have changed, the employees of enterprises have new needs, and the management means of enterprises are constantly updated. Based on knowledge atlas, this paper quantitatively and qualitatively analyses the evolution track, development pattern, hotspot areas and frontier trends of foreign information visualization research, and summarizes the development rules and characteristics of research, which is of great significance for domestic research planning and in-depth research in the same field.
2. The Theoretical Basis and Data Sources of the Study

2.1. Citation Analysis and Co-citation Analysis Theory
Citation analysis is a research area of bibliometrics and an important part of bibliometric research. It is the use of mathematics and logic to analyze the citations and cited phenomena and laws of journals, essays, monographs, etc., to reveal the characteristics of the research objects they contain or the relationship between them. Research method [4]. Along with the introduction and development of Western industrial economics, especially industrial organization theory, China's strategic management discipline has the ability to analyze and explain the influence mechanism of the company's own income situation. As strategic emerging industry is a new concept put forward by our country in recent years, there is no corresponding reference in the world, and the use of this term is mainly concentrated in domestic literature [5]. With citation index, the famous citation analysis method of scientometrics has been developed. With the aid of computer visualization analysis, the evolutionary law, structure, background and dynamic mechanism of science discipline have been studied quantitatively. The number of citations is used to evaluate scientific research achievements and research personnel, and the composition and behavior of information users are studied by citing habits and ways.

2.2. Information Visualization and Co-citation Network Analysis
Using modern computer information technology to process complex scientific and technological information, using computer software to process citation information and to explore and predict frontier science are the research fields that American information scientists have been exploring for many years. The formation, change and implementation of market forces will have a great impact on the business performance of enterprises [6]. Two types of research papers, journal papers and conference papers, as well as subject areas of all disciplines, were selected, and the literature data of all first authors in China were excluded. It shows the complex phenomena of interdisciplinary in the professional field, so as to obtain detailed analysis results of frontier scientific information. The internal management of the enterprise cannot be regulated and measured by the market price mechanism, but its effect will eventually be transmitted to the cost of the enterprise, and eventually cause changes in the profit of the enterprise, thus affecting the business performance of the enterprise [7]. From the perspective of cooperation, the virtual business strategy is a non-property cooperation between market transactions and internal integration. Compared with market transactions, virtual operations are function-creative cooperation, which can create new functions through cooperation [8]. The results of these information analysis will help scientists understand and predict cutting-edge scientific research in the shortest possible time, help to open up new unknown areas in complex scientific research information, and provide objective evidence of rapid independent scientific judgment.
3. Data Processing and Mapping of Scientific Knowledge

3.1. Data Source and Processing
This paper studies the frontier evolution and structure of strategic management disciplines. As the core source of co-citation analysis, academic journals are the premise and basis for research. In the field of strategic management, the pursuit of competitive advantage and how to acquire and maintain it have always been the focus of management scholars and business people. CNKI database is selected as the data source of domestic literature retrieval, and the "strategic emerging industries" and "innovation" are searched directly by topic. Through manual cleaning and processing of literature data, 8934 research papers in the field of information visualization published abroad since 2000 were finally obtained, including 45,812 conference papers and 28,963 Journal papers. The download data is saved in the same folder as a plain text file. When analyzing with Citespace software, the folder path for saving data can be directly selected during the creation of "Project". The use of literature information metrology and social network analysis methods for research, while focusing on quantitative and qualitative analysis methods. CiteSpace software adopts the principle of “divide and conquer strategy” in the design and operation process, and the time segmentation processing of data is beneficial to the running speed and accuracy of the software. Second, the use of data segmentation processing is conducive to identifying the prominent inflection point of the evolution of the discipline and the temporal mode of the frontier of the discipline.

3.2. Drawing Map of Scientific Knowledge by CiteSpace Software
CiteSpace software is mainly used to detect and analyze the time-related trends of research frontiers and the relationship between research frontiers and their knowledge base, and to find the internal links between different research frontiers. CiteSpace software is used to draw knowledge maps to investigate the academic evolution process, research development pattern, research hot spots and frontier fields in the field of information visualization abroad. The node size in the atlas indicates the citation frequency of the author or the document, and the node size is proportional to the citation frequency of the document. In the citation network of scientific articles, the more frequently cited articles tend to be recently published articles, and then the frontiers of subject research represent the current state of the field of subject research. The line between the two nodes represents the reference relationship of the document. The thickness of the line indicates the number of times the node is cited. The thicker the line, the more times the number of times is cited. Specifically, it refers to the ratio of the shortest path line passing through a node and connecting two other nodes in the network to the total number of shortest path lines between the two nodes. By gradually lowering the threshold of co-citation, the so-called gradually expanding knowledge base is proved - a large number of articles with low common thresholds are added to the co-clusters to expand the knowledge base.

4. An Analysis of the Frontier Evolution of Strategic Management Discipline
The era environment of enterprises determines the evolution of strategic management thoughts of enterprises. The idea of strategic management originated from the idea of long-term planning which was produced by the intensification of competition among enterprises. In fact, due to the fact that the correlation between enterprise management activities and technological innovation is increasing day by day, technological innovation may bring about a great change in the way of internal management. The current mainstream paradigm is "matching strategy with structure and environment". However, the master of strategic management, The countries or regions involved in the field of information visualization in foreign countries are widely distributed, mainly in Europe and America. From the analysis of the key literature content at this stage, mainly based on the classic technology innovation theory, although the content does not directly involve the research content of emerging industries, these classic literatures have established a research framework for the versatility of technological innovation research.
Strategic management is an ongoing process that aims to develop and revise future-oriented strategies that enable an organization to achieve its goals, taking into account its capabilities, constraints and operating environment. A key function of the strategy is to align organizational actions (see Figure 1 below).

![Figure 1 Strategic management process](image)

The critical path network based on the author's co-citation is obtained by network pruning and merging on the basis of clustering network. By selecting the appropriate threshold, we can see the clear path of the evolution of the strategic management subject area. It has an absolute research strength in the field of international information visualization, which is closely related to the fact that the concept of "information visualization", the rise of visualization methods and technologies, and the establishment of academic activities such as the International Information Visualization Conference originated in the United States. Technological innovation is likely to have a tremendous impact, which will also lead to people within the enterprise to adopt a more negative attitude to technological innovation. From the radiation range of the circle in the atlas, it can be seen that the theoretical results of this stage have been cited many times in future research, laying the foundation for future related research.

Strategic consumers have no periodic market pricing information. In order to get this information, consumers must visit all companies to observe all the different prices. In a tortuous competitive model, companies sell products to consumers who visit companies during this period. During the consumer inquiry, the company he visited. Figure 2 below is a tortuous competition chart.

![Figure 2 Winding competition map](image)

Strategic alliances often do not use price mechanism as a form of expression among enterprises, but the control of cost and channel in the process of market competition is an important motivation for strategic alliance itself. This management change involves all aspects of enterprise management, and even the survival of enterprises. Corporate strategy issues have once again become the primary issue of corporate management, and traditional strategic management ideas are challenged. When it is foreseeable, the future strategic management world will be the world dominated by the application of materialist dialectics. Compared with foreign scholars, China's strategic management scholars are
more proficient in using materialist dialectics. Therefore, they believe that the competitive advantage of the enterprise comes from the ability of the embedded person in the organizational process, that is, the high-performance practice that is run within the enterprise and determined by the process and location. Of course, scholars pay close attention to the issue of economic development environment, since the 2008 financial crisis, many countries regard emerging industries as a new engine of economic growth, such as the United States put forward the "innovation-driven strategy". In the chart, Nelson, Werner, Williamson and Professor Porter occupy the core position of the chart, affecting the development of the whole field of strategic management. Barney, who occupied the core position of the atlas in the early 1990s, has emerged during this period.

5. Conclusions
Strategic management is a highly applied discipline, which plays an extremely important role in theoretical support and practical guidance in the process of developing China's economy, society and accelerating the construction of a well-off society in an all-round way. CiteSpace visualization application software is a practical tool for dealing with document data. It has powerful citation analysis function and high visualization degree. Especially, it has strong assistant analysis functions such as detection and inspection. Based on the analysis of the relevant literature in China, it is found that the frequency of strategic emerging industries is far higher than other key rivers, and it focuses on conceptual connotation, industrial policy, selection and classification, lacking of multi-perspective analysis. Therefore, a situation that focuses on a certain field of economics or sociology and a certain problem will appear in a large number of graduate thesis. The universal use of structural equations in research methods is a direct manifestation of this problem. The strategic management theory and social network and other institutional theories based on the "resource view" are two important theoretical directions extended by management.

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