

Research Hotspot and Frontier Evolution of Network Anchor in China based on Citespace

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Abstract

With the development of webcast, the career of network anchor has also been widely concerned by relevant scholars. In order to analyze the hot spot and frontier evolution of network anchor research and explore the future research direction. Using the visual analysis tools in CiteSpace and CNKI, this paper analyzes the research status and future development trend of network anchor. The results show that although relevant scholars pay more and more attention to network anchors, at present, the authors of the paper have not formed a fixed research group, and there is less cooperation between relevant research institutions; The current research hotspots include four aspects: the economic form of network anchor, the legal rules of network anchor, the development of network anchor, e-commerce platform and consumers. For example, pay attention to the legal rules of online live broadcasting and tax evasion.

Keywords

Network Anchor; Citespace; Research Hotspots; Frontier Evolution.

1. Introduction

With the rapid development of Internet technology and the wide application of social media, webcast can be seen everywhere. With the development of webcast, the number of webcast platforms has increased, the content of webcast has become more diverse, the number of live broadcast groups has become larger, and the scale of live broadcast audience has been expanding. According to the data in the Research Report on the development of China's online live broadcasting industry in 2021, the number of online live broadcasting users in China reached 635 million in 2021 and is expected to reach 660 million in 2022 [1]. Network anchor has gradually evolved into a new professional type. At present, relevant studies have put forward many definitions of "network anchor".

According to the commonness of integrating various definitions, Li Bin puts forward that network anchor refers to Internet users who publish information, communicate and interact in audio language with the help of mobile Internet technology and platform [2]. The academic circles have fruitful research results on each subdivision of network anchor, but there are relatively few articles on the overall research of network anchor and the analysis of the research hotspots and trends of network anchor. This paper takes the literature on network anchor research in the journal database of China Knowledge Network (CNKI) database from 2006 to 2022 as the data source, draws the knowledge map of network anchor research field in China with the help of CiteSpace software, and presents the development overview, research hotspot and cutting-edge trend of network anchor research [3].

2. Data Sources and Research Methods

This study selects the periodical database of CNKI as the data source. The preliminary search on Zhiwang found that relevant papers were published in 2000, but they have low relevance to this topic. Therefore, this paper focuses on the relevant papers from 2006 to 2022. Advanced retrieval was conducted with the theme of "network anchor", and 1314 journal papers were obtained. After removing some advertising journals, 1289 effective journals suitable for CiteSpace analysis were finally obtained. And import CiteSpace to draw the knowledge map.

This paper uses bibliometric analysis to show the hot spot and frontier evolution of network anchor research. Taking the Chinese academic journal database (CNKI) as the source database, this paper makes an overall description of the annual literature distribution, journal volume and journal distribution of network anchors in China by using the metrological visual analysis tool of HowNet [4]. At the same time, CiteSpace software is used to visually present the authors, relevant institutions, research hotspots and evolution of network anchor research in China.

3. Analysis of Literature Statistics

3.1. Distribution of Annual Documents

The number of annual documents is also an important indicator to measure the attention of a research field and the change of knowledge [4]. The documents issued by CNKI journal database from 2006 to 2022 are shown in Figure 1:

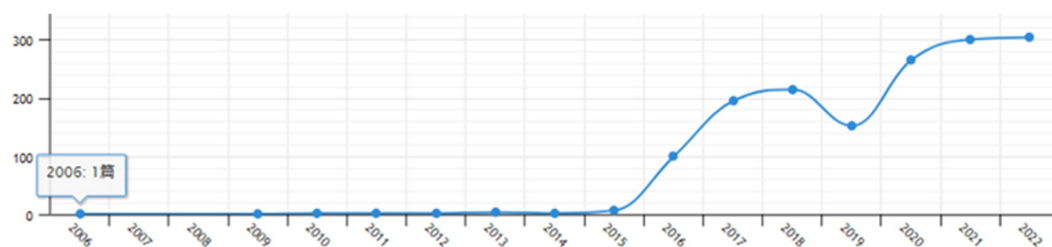


Figure 1. Chronological distribution of network anchor research literature

Although the papers with high relevance to the network anchor had been published in 2006, the number of documents issued had an obvious upward trend until 2015. At that time, due to the lack of popularity of the Internet and social media, relevant scholars had less research in this regard. Until 2016, the "first year of China's webcast", the annual number of documents related to online anchor increased to 100. Subsequently, the number of articles published gradually increased to 214 in 2018. However, the live broadcasting industry entered a reshuffle period in 2018, with great changes. The number of relevant papers published in 2019 decreased to 152. From 2019 to now, the number of papers published by network anchors has continued to grow.

3.2. Volume and Distribution of Periodicals

Through the visual analysis tools in CNKI, the top ten journals in terms of the number of articles published are respectively "news research guide", "media", "Chinese youth research", "people's forum", "news lovers", "modern communication", "news and writing", "international news conference", "contemporary media" and "China Publishing". From the top journals in terms of the number of papers published, there are a large number of network anchor related papers published in core journals. We can make a preliminary judgment on the subject of news communication and the anchor of the network at the same time.

3.3. Author and Research Institution

The author of the paper and the relevant research field can be analyzed by using the network anchor of test space. The results show that Communication University of China has 15 articles, which is the research institution with the highest amount of articles; The school of journalism of Chongqing University and the school of economic law of East China University of political science and law took the second place, with 9 articles. This shows that news communication and law colleges and universities pay more attention to the research of network anchor. It shows that the network anchor involves a series of social and legal issues, which have a great impact.

The author knowledge map generated by CiteSpace shows that most scholars in this field study independently and have little cooperation. At present, Qin zanjin of Hunan Normal University has the largest number of articles. The author mainly focuses on the legal rules of online live broadcasting and game live broadcasting in China. Wang Li of central China Normal University has the second largest number of articles. She mainly studies TV hosts and network anchors. At present, the research on network anchor has not formed an obvious research team. Most scholars solve a series of problems caused by network anchor from their own research field or improve the current situation.

4. Research Hotspot and Frontier Evolution

4.1. Analysis of Co-occurrence of Network Anchor Hot Keywords

Table 1. Hot words of network anchor Research (top 20)

ranking	High frequency keywords	frequency	Initial year	Highly central keywords	Centrality	Initial year
1	Webcast	550	2016	Webcast	1.09	2016
2	Network anchor	253	2016	Network anchor	0.3	2016
3	Live broadcast platform	117	2015	Live broadcast platform	0.14	2015
4	Sell goods through livestreaming	75	2020	anchor	0.08	2015
5	anchor	47	2015	Sell goods through livestreaming	0.07	2020
6	live broadcast	47	2016	live broadcast	0.07	2016
7	new media	31	2016	host	0.07	2013
8	internet	21	2016	Copyright	0.06	2017
9	Labor relations	20	2018	"Net red"	0.03	2017
10	Network anchor	18	2018	new media	0.03	2016
11	college student	18	2017	internet	0.02	2016
12	Legal rules	18	2018	Labor relations	0.02	2018
13	host	17	2013	Network anchor	0.02	2018
14	Internet celebrity	16	2017	Internet celebrity	0.02	2017
15	Internet celebrity economy	14	2017	Legal rules	0.01	2018
16	Reward	14	2017	Internet celebrity economy	0.01	2017
17	E-commerce live broadcast	13	2020	Reward	0.01	2017
18	Live chaos	12	2016	E-commerce live broadcast	0.01	2020
19	consumer	12	2020	Live chaos	0.01	2016
20	Copyright	12	2017	E-commerce platform	0.01	2020

Keywords are the most concise expression of the research focus and core content of a paper, which can intuitively convey information [5]. Therefore, in order to detect the research hotspots in a certain field, we can analyze the keywords and their frequency. Table 1 shows the top 20 keywords in order of importance according to frequency and centrality.

The keyword co-occurrence map of network anchor research is mainly displayed according to the frequency of keywords. The higher the frequency of keywords, the larger the font. It can be seen that at present, scholars have more research on webcast, webcast anchor, webcast with goods and webcast platform. At the same time, scholars pay more attention to the Internet, live chaos and the formulation of relevant laws and regulations.

The top six keywords in the centrality of Table 1 are: webcast, network anchor, live platform, anchor, live with goods and live, indicating that they are important intermediary nodes of the network anchor research knowledge map. This is mainly because the network anchor relies on the webcast and live broadcast platform.

4.2. Cluster Analysis of Hot Keywords of Network Anchor Research

The transformation of keywords into structured clusters is realized through keyword cluster analysis, which can identify the significant research characteristics, topic distribution and related terms in some fields [6]. In this paper, CiteSpace is used as the keyword clustering diagram, and the top 9 clusters are selected.

Table 2. Network anchor research keyword clustering table

clustering	label	Keywords (part)
#0	Webcast	Webcast; Legal risks; Symbolic consumption; Live broadcast reward; Administrative supervision
#1	Network anchor	Network anchor; Service brand; Digital labor; salary system; Labor relations;
#2	sell goods through livestreaming	sell goods through livestreaming Webcast; Cultural industry; differential game; New marketing
#3	Live broadcast platform	Live broadcast platform; Webcast; Internet +; Consumers' purchase intention; Positive influence
#4	anchor	Webcast; Development direction; legal status; Mobile self-media; Broadcast economy
#5	Rational use	Online game; live broadcast; rational use; information network communication rights; player unknowns battle game
#6	Reward	Live streaming platform; bottom line ethics; live streaming audience; live streamer; live streaming hosts
#7	Internet celebrity economy	Internet celebrity economy E-commerce platform; Internet celebrity; Fan community; interpersonal media
#8	Pinduoduo	E-commerce platform; Network media; Online shopping users; Brand manufacturer; Sales base

Combined with the co-occurrence of network anchor research keywords and cluster analysis, it is found that the research hotspots can be roughly divided into four aspects: the economic form of network anchor, the legal rules of network anchor, the development of network anchor, e-commerce platform and consumers.

(1) Economic form of network anchor

In Table 1, the frequency of the keyword "live broadcast with goods" in 2020 is 75. The frequency of "online Red economy" is 14 times, and the earliest year is 2017. It shows that scholars have been paying attention to the economic form of online anchor since at least 2017. In combination with the contents in Table 2, the #2 "live broadcast with goods", "reward" and #6 "online economy" in the table are the main contents of this research hotspot. The network

anchor has created a new situation by combining online shopping and live broadcasting scenes - live broadcasting with goods, which has greatly improved the phenomenon of low consumption due to the epidemic and promoted economic growth. The live broadcasting with goods has gradually evolved into a new business form and is also developing rapidly. Among them, the relevant research on "live broadcasting with goods" mostly focuses on the cultural industry, Rural Revitalization and the sales of agricultural products. The research of relevant scholars on "online Red economy" mainly involves the fan economy, the marketing and profit model of new media or short video and the realization of traffic. Most of these scholars pay attention to the various economic effects brought by the "online Red economy" that are beneficial to both platforms and online celebrities. For "reward", in addition to various economic benefits and profit models, many scholars have paid attention to the chaos of reward for minors and the research on various behavioral motives of reward.

(2) Legal rules of network anchor

It mainly includes #0 webcast and #6 rational use. As of June 2020, the national 12315 platform has accepted 25500 live broadcast complaints and reports, of which nearly 80% are live broadcast with goods, with a year-on-year increase of 357.74% [7]. An endless stream of live broadcast goods fraud and top stream anchor tax evasion have attracted the attention of scholars in various fields. The legal issues involved in "webcast" are mainly about judicial justice, legal protection, legal risks and administrative supervision of officials carrying goods in the live broadcast room. In "fair use", scholars put more emphasis on the originality of live broadcasting, the copyright of game live broadcasting and the protection of copyright and broadcasting rights. In the business model of "live broadcast with goods", there are many relevant subjects and complex legal relations. It is urgent to divide the scope of responsibility of different subjects, standardize and restrict the behavior of network anchors, guide the live broadcasting platform, formulate corresponding industry conventions and supervise all parties [8]. The research on the legal rules of network anchor makes the webcast industry develop more healthily while protecting the rights and interests of relevant groups.

(3) Network anchor development

It mainly involves #1 network anchor and #4 anchor. The main research contents of "network anchor" include labor brand, digital labor, salary system, labor relations, etc. In addition to the legal rules of network anchor mentioned in research hotspot 2, relevant scholars conduct research from the aspect of labor relations of network anchor to protect the legitimate rights and interests of network anchor and realize the balance of rights and interests between network anchor and live broadcasting platform. As a new profession, many researchers also pay attention to the transformation process from traditional media TV host or announcer to network anchor. By studying how the network anchor in the live broadcast affects consumers, refining and summarizing the relevant concepts, they can get some knowledge and experience for reference when the TV host transforms [9].

The academic research on "anchor" mostly focuses on the development direction of anchor, legal status, mobile self-media and live broadcasting economy. In terms of anchor development direction, it mainly discusses the incubation of online red anchor [10], the development of AI anchor [11] and the role orientation of news anchor [12].

(4) E-commerce platforms and consumers

The main contents include #3 live broadcast platform and #8 pinduoduo. The research on "live broadcast platform" mainly involves webcast, Internet +, consumer purchase intention and positive impact. Live broadcasting platform and webcast are usually linked, so there are many related studies. For the purchase intention, different scholars have studied the influence of live spokesperson identity, anchor characteristics or different scenes on consumers' purchase intention [13], and the influence of opinion leaders on consumers' purchase intention [14].

For "pinduoduo", it mainly studies from the aspects of e-commerce platform, online media, online shopping users, brand manufacturers and sales base. The live broadcast delivery platform of agricultural products is also one of the research hotspots. As the upstream supply and sales of agricultural products are mainly realized through pinduoduo, an e-commerce platform [15], scholars have more research on pinduoduo. The mining and analysis of online shopping user comments has also attracted great attention. The research based on users' online comments mainly involves three aspects: first, the research of product feature recognition; Second, the research of user emotion recognition; Third, comment on topic or topic recognition research.

4.3. Research Frontier and Evolution of Network Anchor

To further explore the evolution context and future development trend of network anchor research, we can use CiteSpace software for visual analysis. Firstly, we can draw the keyword time zone map to study the first occurrence year of each hot keyword, and we can intuitively see the change of the heat of hot keywords with time. Use tools to summarize 7 emergent words. Combined with the emergence of research keywords, we can predict the future development direction of network anchor research.

The earliest emergent word "network radio" appeared in 2006, and the most intense emergent word is "victim". Generally speaking, "webcast", "webcast anchor" and "webcast platform" are all high-frequency words studied in recent years. Up to now, they still have a certain popularity. The salient words appearing at different times have certain characteristics of the times.

From 2006 to 2015, "network radio" and "six rooms" were prominent words with high intensity. At that time, due to the underdeveloped technology and the lack of comprehensive popularization of Internet application, there was less research on network anchor. People's understanding of network anchor is not enough, and most of them are limited to network radio anchor. "Six rooms", as a famous video sharing site in China since 2007, is web2 the concept of 0 video sharing also became a hot topic on the Internet at that time [16]. It was not until 2013 that the keyword "six rooms" emerged, indicating that video sharing has experienced a long stage of development. By 2016, people have had a high acceptance of it.

As the first year of live broadcasting in 2016, webcast showed a hot trend, and the keyword "national live broadcasting" also emerged at this time. In 2017, relevant scholars had a new definition of "online popularity" for a group of people. At this stage, while studying the economic benefits and labor relations of network anchor, relevant scholars; A series of social problems behind webcast began to be thought-provoking. Scholars began to rethink the hidden dangers and governance methods brought by webcast.

From 2018 to 2019, with the increase of social events caused by webcast, "minors" and "victims" began to receive widespread attention. Scholars focus on the supervision of webcast and the infringement of online game copyright. At the same time, put forward rectification requirements for all kinds of live broadcast chaos from all angles.

With the emergence of e-commerce live broadcasting in 2020, a new live broadcasting economic model and sales model have also emerged. "Live broadcasting with goods" and "e-commerce live broadcasting" have become hot topics, followed by the integrity, tax and supervision of network anchor with goods. According to the analysis results, the research on the Tax Governance of network anchor and the standardization of live broadcast content should be the research hotspot in the future.

5. Conclusion

Using the research method of information metrology, this paper obtains the relevant paper data of network anchor from the periodical database of China HowNet, and analyzes and visualizes

the data by using the metrological visualization analysis tools of CiteSpace and China HowNet. The main conclusions are as follows:

(1) In terms of the annual number of documents, with the development of webcast, domestic scholars pay more attention to the research of network anchor. The number of documents is increasing, and it is also at the peak of research.

(2) It is obvious from the published journals that the news media and law related scholars have more research on network anchors. Combined with the author of the paper and relevant institutions to confirm this view, but for the research of network anchor, relevant scholars have not formed an obvious research group, and the cooperation between research institutions is not close enough.

(3) Through the co-occurrence and cluster analysis of keywords, we can get the following four research hotspots: the economic form of network anchor, the legal rules of network anchor, the development of network anchor, e-commerce platform and consumers.

(4) Through the keyword time zone map and keyword emergence, it can be seen that future research will pay more attention to the legal rules of network anchor, especially the fraud of live broadcast with goods, tax evasion and tax evasion of network anchor, and the standardization of live broadcast content of network anchor.

This paper is based on the relevant papers in the journal database of China HowNet, and there are some deficiencies. First, there is no restriction on data as the core journal, and the level of papers in some journals is low; At the same time, the manual deletion of non-academic papers has a high subjectivity, which has a certain impact on the subsequent statistical analysis. Second, the data is limited to the journal papers of CNKI, and foreign journals are not selected for research. In the future, foreign journals can be studied to compare and analyze the similarities and differences between domestic and foreign research.

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