

## THE LATEST RESEARCH FOCUS ON “INTERNET +” ACCOUNTING IN CHINA

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**ABSTRACT.** *With the development of the Internet, it brings opportunities and challenges for the accounting industry. Nearly five years ago, Chinese researchers began to focus on “Internet +”. The number of research papers has increased, and has been preliminarily expanded in literature authors, excellent journals and research institutes. Cheng Ping, Gao Yibin, Mao Huayang and Ouyang Dianping are the main force of research under the theme of “Internet +” accounting. However, the theme of research is more dispersed. To explore the new focus in this field is helpful for researchers to systematically research and helpful to promote the development of the accounting profession in China “Internet +” environment. This paper uses the metrological analysis of China’s national knowledge infrastructure project (CNKI) to make a statistical analysis of the retrieved documents.*

**Keywords:** Internet +, Accounting, Research hotspot, Visualization

1. **Introduction.** On the third meeting of the Twelfth National People’s Congress’ Government Work Report, “Internet +” was proposed for the first time. “Internet +” is the “Internet plus various traditional industries”. This is not a simple addition between the two, but through the use of information and communication technology and the Internet platform [1]. The traditional accounting work is based on the core of human nature, through the most basic human labor to register all kinds of accounts, audit company finance and arrange financial files. The rise of the Internet and big data is not only the latest round of opportunity for the accounting industry, but also a challenge [2]. Under the new situation of the accounting personnel with system thinking to knowledge and understanding of the “Internet +”, we also need to keep pace with the guidance of thinking. Accountants constantly improve their work efficiency, and the whole industry will continuously improve their economic benefits. In this environment, it is urgent for scholars to continuously improve the research of theory and practice, so as to guide the accounting work of enterprises.

Xu combed the concept of “Internet +”, and through the mode of “Internet + industry”, let traditional industries use Internet thinking to transform their business processes and business models [3]. Gao put forward that the Internet and the technologies and ideas it carries are driving profound changes in the mode of production and production relations, as well as profound changes and leapfrog development of the accounting industry [4]. Wang introduced the connotation of “Internet +” and its relationship with accounting, and analyzed the positive and negative effects of the Internet on traditional accounting [5]. Zhang and Cui thought that it is believed that the research on accounting reform and development in the era of “Internet +” will become a topic of continuous concern for scholars [6].

Through literature review, we find that there are many researches on “Internet + accounting”, such as the combination of “Internet +” basic accounting theory, the connection of “Internet +” with accounting personnel training, and the combination of “Internet +” accounting teaching. The number and achievements of related research are increasing, which makes it difficult for scholars to find the latest research hotspot. Therefore, this paper combs the research direction of “Internet +” accounting from the overall point of view, in order to find the latest research hotspot.

**2. Data Sources and Research Methods.** On January 20, 2018, search “subject = Internet + and subject = Accounting” through the CNKI under the classification of economics and management science. The time span was 1998-2017, and 2927 articles were retrieved.

**2.1. Time series distribution of literature.** As shown in Figure 1, the research direction of Internet + accounting can be divided into two stages. 1) 1998-2013. There are only 100 documents in this stage. It shows that at this stage, scholars are concerned about the Internet background, but the research results are less. 2) From 2014 to the present. By this time the “Internet +” thinking and accounting caused research boom. A large number of scholars devoted themselves to this field. This stage published a substantial amount of surge.

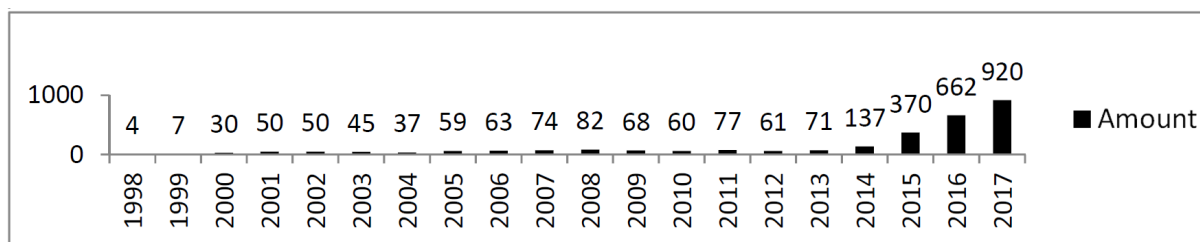


FIGURE 1. Annual distribution

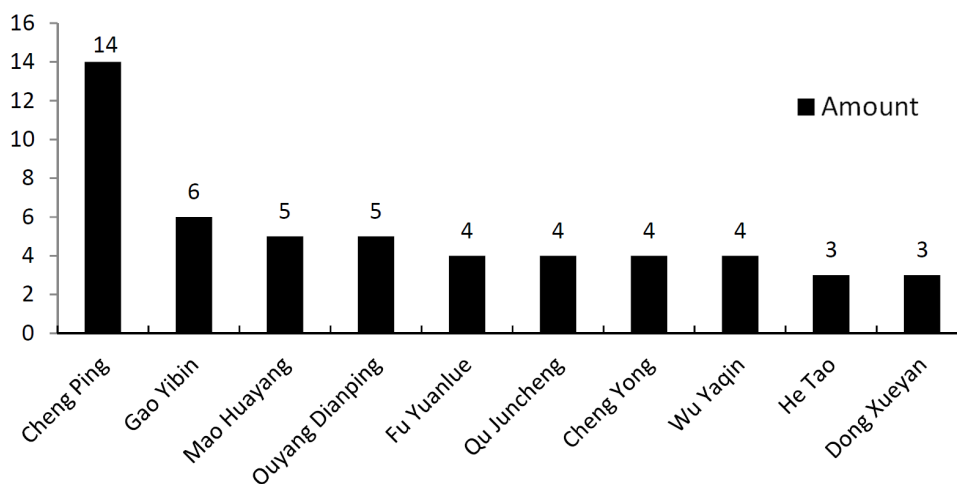


FIGURE 2. Authors

**2.2. Literature author and issuing agency.** With the attention of scholars on the “Internet +”, more and more accounting scholars engaged in the research topic. Cheng Ping, Gao Yibin, Mao Huayang, and Ouyang Dianping are the main force of electric Internet + accounting subject research as shown in Figure 2. They promote the development of the research. Cheng and Zhang said “Internet +” accounting information ecosystem leading the new trend in the development of accounting industry [7]. Gao thought through the

study they can find that the Internet technology has changed the traditional accounting model, accounting and business activities to achieve synchronous integration, solved the problem of rapid transfer between units in the electronic information, breaking the geographical restrictions of accounting services [4]. Mao and Liu focused on the analysis of brainstorming and the transformation of specific application in upgrading the financial management under the background of “Internet +” [8]. As shown in Figure 3, the issuing agencies are widely distributed, but the core research institutions are less. Among them, there are 3 first grade institutions with 30 or more articles. The most notable figure in the picture is the Chongqing University of Technology. Cheng Ping came from the Accounting School of Chongqing University of Technology and the Cloud Accounting Research Institute of Chongqing University of Technology, providing most articles for the above institutions in the Internet + accounting research.

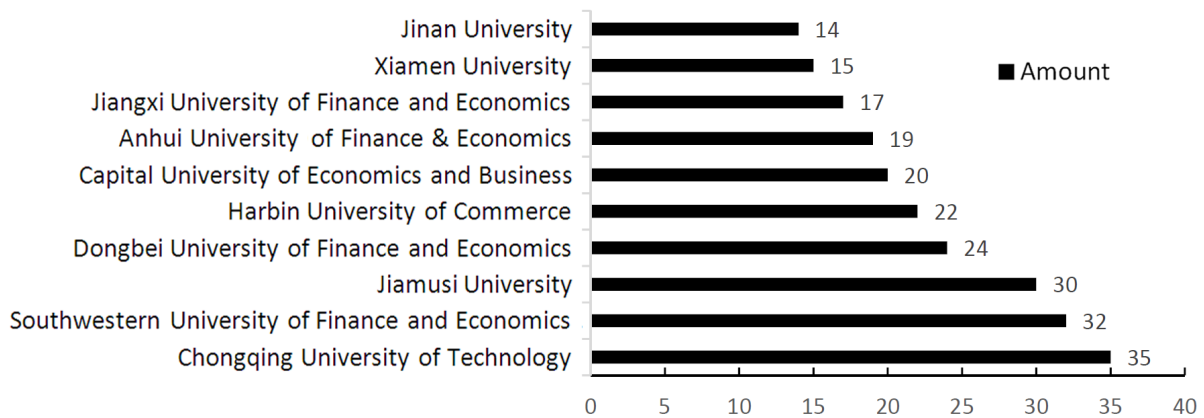


FIGURE 3. Institution

**2.3. Source of literature.** According to the distribution of the publishing institutions of the “Internet +” accounting research in the CNKI database, the amount of the publication of the periodicals is obtained. For example, only two journals publish about 100 articles each as shown in Figure 4. “Accounting Learning”, “Modern Economic Information”, “Market Modernization”, “China Township Enterprises Accounting” and “Manager” published more literature. That periodical sources are more concentrated. However, overall, the distribution range of literature shows that all kinds of accounting journals need to pay attention to the research of “Internet +” accounting.

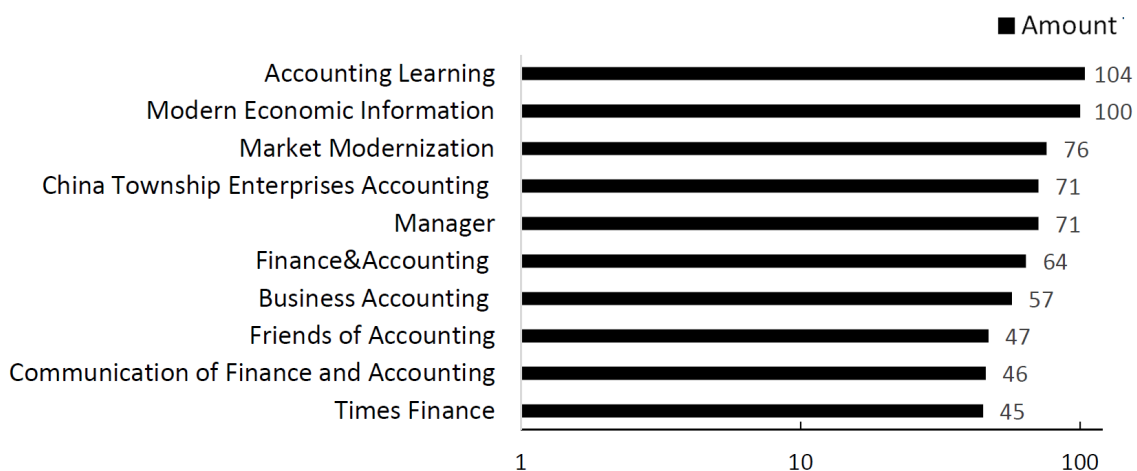
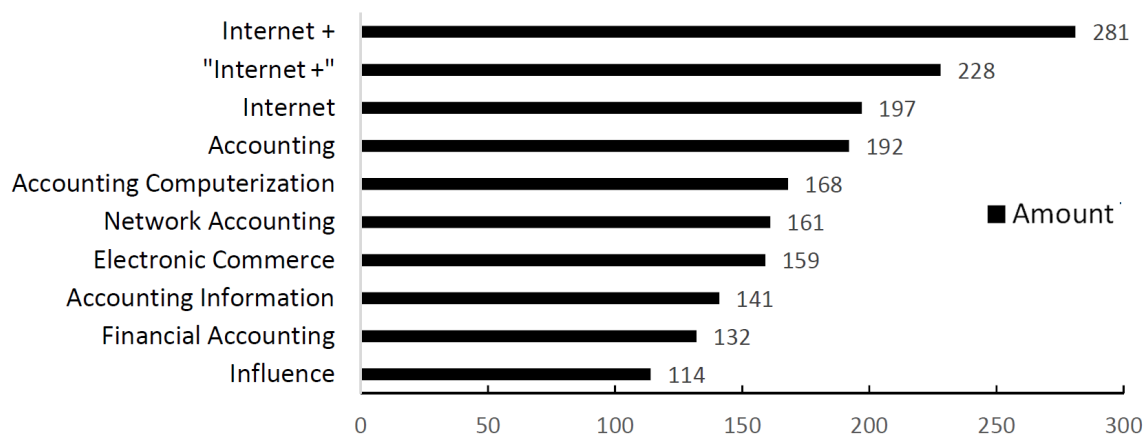


FIGURE 4. Source of literature

**3. Hotspots of “Internet +” Accounting.** Keywords are the core words for summarizing the main points and contents of the paper. By analyzing the keywords in the literature, we can find the key nodes, that is, the hotspot in the research. The frequency of the keywords is proportional to the study heat, the higher the frequency of the keywords is, the stronger the research heat is. According to statistics, during the period of 1998-2017, CNKI database including 2927 “Internet +” accounting papers can be seen. The Internet + and “Internet +” are the largest nodes, followed by the “Internet”, “Accounting”, etc. These high frequency keywords reflect the focus of attention and research tendency of scholars to a certain extent.



Note: If we search “subject = Internet + and subject = accounting”, 1378 documents will appear. If we search “subject = “Internet +” and subject = accounting”, 1378 documents will appear. However, they have no difference in meanings. The distinction between the first two words is only quotation marks.

FIGURE 5. Hotspots

**3.1. “Internet +” management accounting.** Under the background of “Internet +”, management accounting research direction has attracted much attention. However, compared with traditional management accounting, its theory and practice is lagging behind. So how to effectively promote the Internet + management accounting research is one of the hotspots and difficulties in the theory and practice. Research on management accounting information mainly focused on design management accounting information system of management accounting application of information technology, cloud computing and big data management, accounting and management accounting, management accounting and network economy and other fields, specializing in small groups, the number of research papers and research on information management accounting is not fixed. Xu et al. made a new perspective from financial shared services, analyzed the factors affecting the financial management accounting information service based on shared, expounded the current development status of China’s accounting information management and the main problems, the key point of combing the management accounting information construction, and put forward relevant countermeasures of management accounting the construction of information, in order to provide reference for the research on the theory and practice of management accounting information [9]. The research team based on Chongqing University of Technology focuses on cloud accounting, information ecosystem, cost control framework and so on. According to the characteristics of the current situation of the development of management, Zhang and Yu found that management accounting framework guides the daily business activities, investment activities and financing activities. It does have a great significance both in theory and practice [10]. Zhang and Wang researched “Internet +” era of management accounting and the development trend of change [11].

Put forward a new vitality and connotation for the development of management accounting, one of its important functions is to make good use of relevant data to predict the future of enterprises, and help business managers to make the right decisions. In the background of big data, we should study the strategy of transformation from financial accounting to management accounting under the background of big data. By improving the professional quality of financial staff and training future oriented decision making angle, we strengthened information construction and realized the transformation of the whole work content of financial department.

**3.2. “Internet +” financial accounting.** The characteristics of Internet + financial accounting environment are highly integrated with modern information technology. For example, online payment and online settlement will be fully realized based on monetary computerization. The way of financial staff work will be online office, mobile office, online learning and so on. The mode of data transmission is paperless and networked. The original financial data of enterprises can directly use online business information without manual input, and the original financial voucher is processed directly into accounting voucher through financial management software. The security of the information system is prominent. It mainly refers to digital signature, security audit, cryptography and so on. Centralized management and real-time dynamic management are more perfect. Some scholars study the era of big data enterprise group financial management transformation. Under the big data technology opportunities, they proposed the accounting manual state to full automation transformation. Financial analysis centralized the management of funds to the combination of industry and finance transformation. More attention should be paid to the comprehensive budget management transition to strategic decision-making. Otherwise, the theory of financial management can not only lead the management practice, but also be easy to form the theory and practice of “two pieces of skins”. “Internet +” put forward new requirements for financial management. The main body of financial management tends to be virtualized. The target of financial management is diversified. The knowledge capital occupies the leading position and the structure of financial management is flat. Like Alipay, WeChat and other electronic payment can not only save time and cost, but also ensure the security of transactions of funds to a large extent [12]. This is the challenge for the financial management of the “Internet +” environment.

**3.3. “Internet +” audit.** The application of the “Internet +” accounting mode in the big data environment will have a great impact on the existing audit mode. Hu showed how to transform and develop the internal audit in the future [13]. Qin put forward the “Internet +” to provide personalized service and promote the audit service level upgrade [14]. He also improved service efficiency and promoted the construction of the audit. Use the audit object and the cloud platform to change the content and improve the audit regulations. He also thought audit staff should update their thinking under the development trend. From three angles of continuous auditing mode, overall auditing mode and networked auditing, Liu has studied the development prospect and trend of audit method under the “Internet +” environment [15]. Chen through the innovation of the concept and methods of audit improved the development of the audit in the new environment [16]. The fusion “Internet +” under the auditing reform needs to focus on the Internet and the characteristics of the audit, the advanced information technology thinking embedded audit idea and method, so as to promote the innovation and development of audit. Only by continuous innovation can we continuously improve the efficiency and quality of audit work and achieve the purpose of audit. So audit can maximize its significance and value in the economic society. Su established a framework of audit process based on cloud accounting, with a view to enlightening the audit work [17].

4. **Conclusion.** Through the analysis of relevant research, it shows that there are still some noteworthy problems in the research of “Internet +” accounting. First of all, from the aspect of research content, we should attach importance to the study of the accounting theory system of “Internet +”. We need to develop some “Internet +” accounting application guides, strengthen accounting practice, sum up the experience of Internet accounting, and prepare well for the challenge of “Internet +” accounting challenges. On this basis, we should expand information technology and study “Internet +” management accounting. Theory and case studies should be carried out at the same time. The research of management accounting under network environment is of great significance. Both theoretical analysis and case analysis have constructed theoretical models, whether successful or failed. It is conducive to the practice of enterprises and the development of management accounting theory. The development of Internet big data has made the Financial Shared Service Center appear in people’s vision. Simple accounting can no longer meet the needs of enterprise development. With the development of “Internet +”, data such as performance management data, enterprise budget data, product information, and customer evaluation data are easy to collect. Similarly, the study of “Internet +” audit should attract scholars’ attention. The existing audit mode is based on the development of traditional accounting industry. With the development of accounting in the network environment, the audit mode has changed. All these need further study by relevant scholars. Secondly, the number of documents, authors, excellent journals and research institutions has already had a certain scale. The authors such as Cheng Ping, Gao Yibin and Mao Huayang are the main force of “Internet +” accounting research. They promote the development of research. However, in addition to Cheng Ping, other authors have less research. “Accounting Learning”, “Modern Economic Information”, “Market Modernization”, “China Township Enterprises Accounting” and “Manager” are the main periodicals that publish relevant articles of “Internet + Accounting”. The School of Accounting of Chongqing University of Technology and the Institute of Cloud Accounting of Chongqing University of Technology, represented by Cheng Ping, are the main research subjects of “Internet +”. The above institutions provide the most articles for “Internet +” accounting research. It can be seen that there are fewer kinds of journals publishing related articles and their levels are different. After that, scholars should pay attention to the quality and systematization of research.

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