Discussion on the Bottleneck of Comprehensive Accounting Information: Accounting Information Standard*

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Abstract

China’s current computerized accounting standard because of its "hand-thinking", "national standard" applied a mere formality, etc., does not apply to accounting information. Limitations of issued accounting information standards become the bottleneck of comprehensive promotion of China's accounting information. The accounting regulation system should be modified, the management system and the accounting information standard system should be established.

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1. Computerized accounting standard does not apply to accounting information

1.1. Brief introduction of China published computerized accounting standard

The computer technology has been applied to the accounting field in China since 1979, and then, corresponding computerized accounting standard is formulated. Provisions for Accounting Software Management released by the Treasury Department in 1989, Computerized Accounting Management Method, Basic Functional Specifications of Accounting Software, and Commercial Accounting Software Review and Adjudication Rules released in 1994, Computerized Accounting Work Standard released in 1996, Information Technology: Accounting Software Data Interface released by Standardization...
Administration of China in 2004 and the like are more typical. They have profound influences on substitution of manual accounting, accounting and management information fusion, elimination of information islands or the like.

1.2. Computerized accounting standard is a hand-thinking standard

The computerized accounting standard is formed by fusing theories and rules of information technology, analyzing functions, modules and structures or the like of existing accounting software based on basic theories, basic functions and basic procedures of manual accounting. The computerized accounting standard plays important roles in performing accounting data processing and accounting information utilization for standardized electronic information technology, improving the accounting standard and quality, playing accounting function, promoting the research and development of accounting theory and technology etc. by fusing the manual accounting theory and the information technology.

With the development of modern information technology, in order to implement “2006-2020 national information development strategy”, the Treasury Department decided to promote China's accounting information work comprehensively since 2009, so that great changes have taken place in accounting methods and practices, and many accounting theories could not guide the accounting practice. For example, the target of computerized accounting differs from that of comprehensive accounting information greatly. Theoretical research of accounting information system is lagging in a national information development strategy environment. The rules and processing procedures of the accounting information system do not change as the modern information technology, and the accounting rarely considers changes caused by computer and communication, network access to the accounting field etc. so, China's current computerized accounting standard based on “hand-thinking” has become a bottleneck of comprehensive accounting information.

1.3. Authoritative “national standard” is a mere formality

China's national standard Accounting Software Data Interface (GB/T19581-2004) was proposed by the Auditing Administration and the Treasury Department and studied and drafted by experts, approved and released by National Standards Commission in 2004. This is the sole “national standard” in China's computerized accounting construction. It plays important roles in processing standardized accounting data, improving compatibility and interconnectivity, overcoming “information islands”, improving information quality, unifying financial software data format, and promoting the development of accounting software industry etc.

However, the national standard was presented in forms of text file and Extensible Markup Language (XML), not in a form of Extensible Business Reporting Language (XBRL) internationally accepted currently, which causes deficiencies of nature. The Treasury Department (national standard maker), the State-Owned Assets Supervision and Administration Commission of State Council and industry department still require all units to use “Join-Cheer” reporting software etc. to edit and summarize the accounting statement. The accounting software developers do not develop and apply data elements and assisting accounting in the national standard, only increase an interface or a module so as to cater to the national standard. To unit accountants, the national standard interfaces of the software are technical obstacles, almost no unit can use the national standard, units only enter report data repeatedly, which causes separation of logistics of enterprise, capital flow, information flow and workflow to create another “system island”.

2. Issued accounting information standard has limitations
2.1. Implementing features of issued standards

In order to promote China's accounting information work comprehensively, the Treasury Department released Extensible Business Reporting Language (XBRL) General Classification Standard (referred to as “issued standard” in the paper) based on in 2010, which is the sole accounting information standard of China, marking the beginning of the age of accounting information[1].

The issued standard is implemented starting from enterprise accounting standard, each data element in enterprise resource flow (i.e. logistics, capital flow, information flow and workflow) is labeled with XBRL, and effectively connected to the network technology. Original data do not need to be entered repeatedly after being input. Different computer systems can uniformly automatically search data, convert data format, extract data of different data sources rapidly and accurately, generate useful information through comparison and analysing, generate an instance document by means of XBRL software, and submit and report the instance document[2].

2.2. Issued standard is only a reporting standard

The precondition of comprehensive accounting information is record (e.g. sale slip, material requisition etc.) information, and based on this, report information is possible. The issued standard is essentially a reporting standard. To implement the XBRL record standard is the premise to play the role. So, the role of single reporting standard without framework, system and base is limited.

Simultaneously, the instance document given through XBRL software has been out of the data source, the information system of the enterprise cannot share it externally. If the XBRL software does not extract enough data from the database (unsupported by law if too much), meeting the diversified and multi-level information needs of multiple external main bodies in a uniform report format is a “false proposition”, because there is no “raw material” accessible at any time.

2.3. Issued standard is not an accounting information system

XBRL is fundamentally a computer language. Its formulation and application shall be supported by the information system, for example, instance document preparation software, instance document browsing software, data mining software etc.[3]. The accounting information system is an information system taking computer technology, database technology and network technology etc. as foundation and basic tools to manage and check unit resource flow. So, the information system based on XBRL shall be developed to generate, submit and use XBRL instance document.

If filling and submitting software compatible with the information system software that the enterprise is implementing is developed only, or XBRL report module is added in the information system software, or the standard will follow in the footstep of the aforementioned computerized accounting “national standard”. The information system based on XBRL shall be developed according to XBRL reporting standard to avoid stepping into the mire of accounting software development in 1980s: a spontaneous, decentralized and repeated development was performed according to single function, user's requirement or developer's understanding, then the final result is no standard.

2.4. Enterprise's enthusiasm to apply the issued standard is not high

The issued standard is essentially an external reporting standard of accounting information. The biggest beneficiaries are external information collectors and users, but not providers themselves. Enterprise's enthusiasm of development and application is not high[4]. Meeting the diversified and multi-
level information needs of externally unspecified multiple external main bodies is “sacrificing” the information advantage of the enterprise. In consideration of safety and confidentiality, the implementation also comes close to a halt. Enterprise's existing information system architecture is too complex. It shall be rearranged and converted into a uniform format, which relates to the transformation of software, capital investment and other interests, and causes contradiction of implementation. XBRL is used for recoding the basic information of enterprise, and realizing generality, extensibility, unification and standardization of accounting information from inside to outside. Managerial efficiency will be improved greatly. But due to technical obstacles of XBRL, it is difficult to implement the issued standard depending on enterprises at present and it is impossible to extend the implementation.

3. Suggestions of establishing accounting information standard system

3.1. Modify accounting regulation system

Existing accounting rules and regulations system is basically based on manual accounting and computerized accounting modes. The accounting information does not have legal status. As specified in Accounting Qualification Certificate Management Method, computerized accounting graduates who take part in examinations and pass one course can obtain accounting qualification certificate. But accounting information graduates must take part in examinations and pass three courses to obtain the certificate. At the same time, the existing law takes stamped signature of manual accounting operation as identification criteria. How to realize legal identification of electronic signatures, and get rid of the constraint of traditional paper identification is a subject worth studying under comprehensive information background. So, it is necessary to modify the Accounting Law and comprehensively sort out relevant laws and regulations.

3.2. Establish management system of accounting information

At present, no management system of accounting information implementation exists in China, so the author emphasizes the “establishment” of accounting information management system, rather than “soundness”. Accounting information management methods, accounting information training methods, accounting information foundation job standards, accounting information job regulations, accounting information system basic function regulations and accounting information review and adjudication rules shall be at least established.

The author believes that the basic function of the accounting information system shall be composed of finance accounting system, business management system and information mining system. The finance accounting system consists of sub-systems such as accounting treatment, cash management, payroll management, fixed asset management, dealing management, accounting statement or the like; it focuses on the management of value for money flow. In case of business enterprises, the business management system is a supply chain system, including sub-systems such as purchasing management, sales management, inventory management and inventory accounting or the like. In case of universities, the business management system includes sub-systems such as educational administration, science and research management, logistics management or the like. The business management system focuses on the management of logistics and workflow.

3.3. Establish accounting information reporting standard

Disclosing accounting information to the public is one of the basic responsibilities of accountants.
Therefore, accounting information report standard system shall be established, including at least two parts as follows:

One is a reporting standard based on accounting rules to standardize the generation, reporting, disclosure and utilization of accounting information, specifically including XBRL general classification standard based on enterprise accounting rules (issued in 2010), XBRL general classification standard based on administrative institution accounting rules, XBRL general classification standard based on civil nonprofit organization accounting rules, XBRL general classification standard based on small business accounting rules etc.

The other is a reporting standard based on internal control evaluation. That is to say, in combination with the implementation of internal control standard system, according to internal control flow and key control point, XBRL general classification standard based on internal control evaluation report is formulated to automatically generate internal control evaluation report and meet different users' needs.

3.4. Establish accounting information recording standard

The means that the accounting information system manages business activities is original documents, such as purchasing and selling slips, purchasing and selling invoices, payment receipts, inventory documents, hour norms, asset cards, degree of completion, production plan, performance evaluation or the like. It continuously transmits, receives, reproduces and stores various business data by taking original document flow within the computer independent of business activities as a link to form a comprehensive and rigorous information network and simulate, guide, standardize, monitor and store instantaneous or intangible economic business flow trajectory in the business activities, thereby achieving real-time management of enterprise resource flow.

Accounting information record standard is the most fundamental, the most complex and the most abundant one of accounting information standards, which can be extensibly formulated and applied by software developers or enterprises according to accounting information reporting standard. But the author believe that a record standard framework and structure based on XBRL shall be issued by the maker of accounting information reporting standard to prevent spontaneous, decentralized and repeated development and ensure the authority, uniformity and flexibility.

3.5. Establish other accounting information standards

Relevant laws and regulations (e.g. Tax law, Securities Law) and needs of audit and tax regulators etc. shall be considered fully when the accounting information standard is formulated to formulate auditing standard based on XBRL and examination standard based on XBRL.

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