

# Exploration of University Procurement Information Construction and Management Mode——Based on the Exploration of the Whole Life Cycle of the Project Construction

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**Abstract:**Under the background of deepening the reform of "delegating power, delegating power, delegating power and providing services", the independent authority of the procurement management of colleges and universities is enhanced, and the improvement of the procurement efficiency and standardizing the procurement process by relying on information technology are important means for the procurement management of colleges and universities under the new situation. At present, the procurement management means is relatively backward, information construction is in its infancy, and college procurement management is a part of the whole process of the project construction, is closely related to the upstream and downstream management, establish based on the whole life cycle of project construction procurement management information mode, is to ensure the important guarantee of procurement management in colleges and universities.

**Key words:** Procurement management; Information; Life cycle

## 1 Introduction

College procurement management is a component part of the construction of a high-level socialist market economic system. With the advent of the information age, information technology has become an important support and engine for economic and social development. Strengthening the information construction of university procurement work is the need of the development of The Times. Information technology construction is a complex system engineering. It needs high-tech support, cross-departmental cooperation. At present, most of the procurement management information in universities is in its initial stage. Whether to explore scientific and effective pioneering approaches, is the key to the construction of university procurement management information. Whether the information construction of university procurement management can achieve long-term practical results. Needing to clarify the current situation on the basis of reasonable positioning and scientific planning.

Currently, in the context of the continuous deepening of the reform of "delegating power, streamlining regulation and providing services", in the field of government procurement. The state has introduced a series of policies to deepen the reform measures of "streamlining

administration, delegating power, strengthening regulation and improving services". Not only has raised the quota standard of the government procurement budget. In most regions, the quota for decentralized government procurement was raised to 1 million Yuan. The amount that must be raised to 4 million Yuan, at the same time, a series of documents closely related to the scientific research procurement of universities have been issued. It clearly requires to expand the autonomy of university procurement management. Simplify the procurement process of scientific research instruments and equipment. Shorten the procurement cycle, Enhance the flexibility and convenience of procurement.

But the reform of delegating power, delegating regulation and providing services is not leaving it alone. It's a combination of more advanced means. Put forward higher requirements for the internal control management of universities.<sup>[1]</sup> And the procurement work has its particularity. On the one hand, the sources of university procurement funds are diversified. Different sources of funds have different procurement management requirements. On the other hand, the types of items purchased by universities are complex. The procurement business involves a wide range of areas. The traditional procurement management mode is difficult to meet the new situation and the actual procurement work requirements of universities. Relying on information technology to improve the quality and efficiency of government procurement and risk prevention, it is the key to the implementation and implementation of the reform of "delegating power, regulation and service". With the wide application of information technology, the use of information means has become an important technical support to improve the procurement efficiency and realize the open, fair and just procurement.

## **2 Analysis of the status quo of university procurement information construction**

### **2.1 Weak awareness of procurement management information construction**

Information technology construction needs the unity of action and consciousness. Compared with other purchasing entities, universities, due to their complex sources of funding, wide range of procurement items purchased, procurement information construction requirements are very complex. Many factors that need to be considered comprehensively. The information construction of procurement work should not only have an overall plan for the goals that need to be achieved, but also to the information construction to achieve the functional effect of a clear demand. But the procurement management department of colleges and universities generally belongs to the teaching auxiliary department. A limited number of personnel working in the procurement business. The number of full-time procurement personnel is limited. Some universities even have only part-time workers. It is difficult to plan the procurement management work comprehensively. The basic conditions for carrying out information technology construction are even weaker. In the practice process of developing information construction. More is according to the leadership requirements and policy arrangements to conduct targeted information construction. Instead of carrying out the information construction from the perspective of optimizing the procurement business work management. The consciousness of information construction is extremely weak. Not only is the lack of reform and innovation, out of touch with the actual needs of university procurement business management. Copy the procurement system of enterprises, as the construction of

procurement information only stays on the basis of completing the task. There is even an opposition to the information construction.<sup>[2]</sup>

## **2.2 Backward procurement management methods**

With the development of information technology, information application in the field of government procurement is more and more widely, quota of government procurement activities regulators generally establish procurement management information platform, using information technology to regulate the development of the procurement process, but universities as purchasing owner, in the internal procurement management process of information construction is relatively backward, most college management mode still stay in the original mode, still using people to people management, procurement process information is still given priority to with paper documents. As procurement is a high-risk business, procurement owners have the corresponding procurement approval process within the internal. The traditional management mode of procurement documents still stay in the paper material circulation review. Low work efficiency; A large amount of paper procurement materials not only need supporting space and human resources for management, and the access of the data is not convenient. Management is difficult; The data, effect and other information of the procurement business are isolated from each other. It is difficult to form an effective data sharing; Procurement activities are very difficult to supervise. Procurement decision basis, specific problems in the implementation process, procurement effect evaluation can not be reflected in time. It is difficult to reflect the whole picture of the actual procurement process in the future audit and inspection.

## **2.3 The information construction system is not perfect**

With the continuous improvement and standardization of government procurement management by laws and regulations and management regulations at all levels, and the increasing procurement business volume of universities, many universities gradually realize the importance of information construction to procurement management, and begin to try the information construction of procurement management. Procurement management is a link of project construction. During the construction process of the project, With the early procurement development of the procurement decision, project approval, demonstration, capital planning, contract signing after procurement completion, performance acceptance, effect evaluation and other links constitute a complete project construction life cycle, in practice, Although many universities have established procurement management systems, However, the construction requirements of the procurement management module are not considered from the whole life cycle of the project construction, Generally, taking the object-oriented or process-oriented information system as the entry point for planning and construction. Built solely as a single module, no upstream and downstream links related to procurement management. Although many network systems have been built inside, the information exchange between the various systems is difficult. Form an information island to limits the application scope. It is not conducive to the sustainable development of government procurement information. When it comes to upstream and downstream related work docking, must still be developed through traditional models. Function is relatively single, the role of improving work efficiency is greatly reduced, besides, information construction in the procurement implementation link. There is also a disconnect between demand and system

construction, procurement system construction simply applies the procurement management module of the enterprise. Not addressing the needs and characteristics of universities in the procurement work. In practice, the information operation is not smooth. Some universities' procurement systems end up becoming simple document transfer tools. Even by being directly abandoned, not only cannot play the role of information construction in procurement management, and cause a waste of resources.<sup>[3]</sup>

### **3 Analysis of the information construction path of university procurement management**

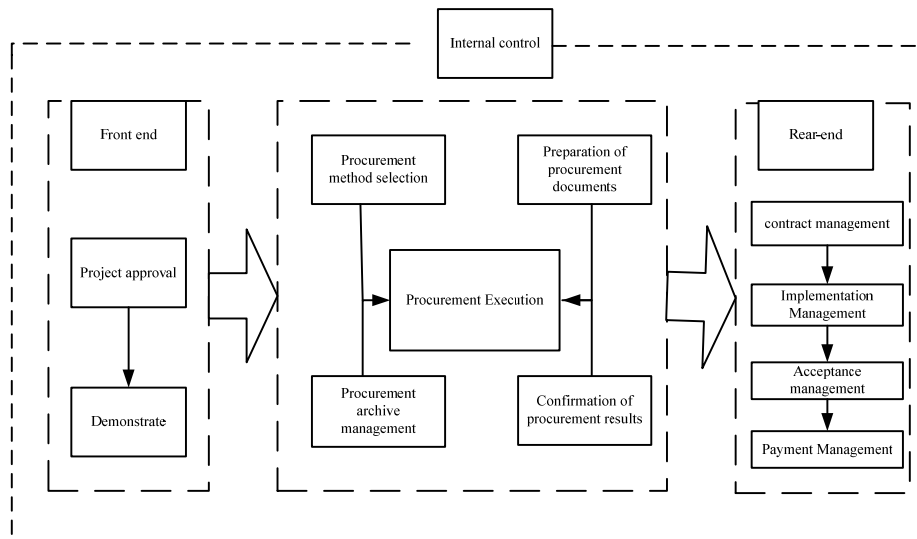
#### **3.1 Establish and improve the procurement management system**

The perfect procurement management system is the central element of the procurement information management, and the information construction of the procurement work can be realized under the perfect procurement management system environment. First of all, the establishment and improvement of the procurement management system is an important guarantee for the clear rights and responsibilities in the information construction. Universities, as the main purchasers in the market. In the procurement activities, he is the main person responsible for the procurement activities. But in the internal management, due to the need of implementing the three separation of "decision-making, implementation and supervision" of government procurement. Internal need to divide the rights and responsibilities. Therefore, in the process of information design, need to clarify the procurement process of projects of different nature. Approval authority of different participants in the procurement process, Ensure that the participants in each procurement process strictly implement their job responsibilities, straighten out the organizational framework of the internal control system. This is the foundation of procurement information construction, This foundation needs to be clearly defined through the system. To avoid prevarication, the phenomenon of work wrangling. Secondly, the establishment and improvement of the procurement management system is the core key to realize the standardization and standardized management through information technology. <sup>[4]</sup>Against the background of the country's reform to delegate power, improve regulation and provide services. The government procurement quota standards and the bidding quota standards have been significantly increased. The autonomy of the purchasing subject is getting higher and higher, and procurement work has always been a high incidence of integrity issues. So in the new market environment, to strengthen the internal control management also put forward higher requirements. Classification standards of procurement quota, selection criteria of procurement methods, selection mode of the procurement platform, preparation and review process of procurement documents, need to have the corresponding management system to make it clear. In particular, the university procurement business is complex and diversified, more need to rely on institutional regulations. To form a standardized and standardized workflow, forming the internal logic standard of procurement information construction. Therefore, college procurement subject needs in the national laws and regulations and the business department regulations, on the basis of exploring the actual situation of the school characteristics, through the collaboration of different departments to form perfect procurement system, to ensure that the standardization of procurement behavior, as the procurement management information construction demand,

on the basis of perfecting the information function, make information means effective service for procurement management.

### **3.2 Build an information construction system of the whole life cycle**

Procurement management in colleges and universities is not a single, isolated business. It is a link in the whole life cycle of the project construction, To ensure that the information construction of this link meets the needs of actual operation, take a long-term view, from a global perspective, from the perspective of the whole life cycle of the project construction, the requirements of information construction. Electronic recording of all operations throughout the whole life cycle of the project. Ensure the review and circulation of the whole process of information. Standardize the business processes. Establish the project approval and demonstration link including the front-end procurement decision, and the contract management, implementation management, acceptance management and payment management business, intercommunication, system of mutual restraint, front-end decision-making link, improve the project decision-making and approval process, Using information means to connect the project necessity and feasibility demonstration, avoid blind project construction. At the same time, using information big data to analyze the specific procurement needs. On the basis of the associated school inventory and previous construction projects, scientific and reasonable formulation of procurement requirements, avoid excessive purchase quantity and purchase model does not meet the requirements. Repeated procurement, procurement demand emptiness, etc.. Early requirements are clear, the information process set up in the procurement execution process can only be transferred normally. Otherwise, during the procurement process, the procurement execution process continues to continue, unable to move forward smoothly; After procurement execution. Push the purchase results to the follow-up implementation management, subsequent contract signing, implementation management, acceptance management and payment management must be carried out according to the information pushed by the procurement execution link. To avoid the risk of a disconnect between procurement and implementation, and by evaluating the feedback. Evaluation the procurement approval process, participating departments and participating suppliers, form the evaluation information, provide reference and basis for follow-up procurement decisions, and constantly optimize procurement management. In specific procurement execution link, follow the procurement business internal logic sequence, build the choice of purchasing methods, procurement document preparation, procurement results and the management of the key link of information management, using information technology to improve the efficiency of procurement execution circulation, and form throughout the whole life cycle of information management internal supervision system, process supervision, from the procurement decision source to the final evaluation feedback, all links can through the information platform of electronic records. In view of the characteristics of the purchasing subject in colleges and universities, the construction of procurement management information only relies on the whole life cycle of project construction and establishes the closed-loop management mode (see Figure 1), can the goal and demand of procurement management information construction be effectively realized.<sup>[5]</sup>



**Figure 1:** Procurement management information construction based on the whole life cycle

### 3.3 Enhance the awareness of information management of procurement work

Based on the whole life cycle of project construction to carry out the information construction relying on the procurement department to complete alone, need to work together before the business department, so need universities from the whole school management level attaches great importance to purchasing information construction, coordinate from the school level, to get through business barriers, effective cohesion before and after the business. For the purchasing business department, we should increase the training of purchasing staff, improve their comprehensive quality, and be familiar with the professional knowledge of relevant government procurement, so as to put forward the scientific, reasonable and operable information requirements in the process of purchasing information construction; also strengthen the information literacy of the purchasing personnel, enable them to skillfully use the internal purchasing information system, operate external purchasing information platform, and construct a security defense system with advanced technology and professional equipment, constitute a credible application environment and ensure the security of data information and physical equipment. Constantly improve the information management awareness of purchasing business staff, make it fully realize the importance of information technology to improve work efficiency. In order to effectively use the information means in the time work, The traditional paper file information, by forming a database through information means, support any-time retrieval, query, statistics, analysis and other functions, reduce the repetitive workload and data distortion caused by manual operation, build the supplier database and the expert database through the procurement work accumulation, internal big data such as procurement document template, constantly improve the procurement management information platform, you can even try to explore the connection between the internal management platform and the external procurement platform. Although it is still difficult to achieve due to policy and technical constraints, the information awareness of procurement

business personnel is constantly enhanced. As a front-line practical operation personnel is an important guarantee to promote the realization of this goal.

## 4 Conclusion

With the rapid development of procurement business in colleges and universities, strengthening the information construction of procurement management is an important guarantee to promote the efficient development of procurement management in colleges and universities in accordance with the law, regulations and regulations. Through the application of information means, the efficiency and management quality of procurement management can be improved. In the state and regulatory departments at all levels under the background of purchasing management system and regulations, colleges and universities to continuously strengthen the consciousness of procurement management information construction, through the system specification procurement information construction requirements, in practice, not only to focus on purchasing execution of informatization, realize procurement process standardization, standardization, transparency, and placed procurement management in the whole life cycle of project construction, to cooperate with upstream and downstream work, realize "decision-making, execution, supervision" trinity, reduce unnecessary waste of resources, strengthen the whole process of internal control management, improve the efficiency of procurement. To provide support for the teaching and scientific research work in colleges and universities. Of course, it is a long-term task to improve the information construction of procurement management in colleges and universities. Only by optimizing and improving it with The Times can we adapt to the requirements of the adjustment of procurement business and the development of The Times.

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