

# Analysis on Research on the Construction of Government Finance Sharing Based on the Integration of Industry and Finance--Evidence from China

Qing Lian, Min Li, Huizhen Xu

School of Finance and Economics, Jiangsu University, Zhenjiang 212013, People's Republic of China

Email address: 1186687076 @ qq.com

**Abstract**— With the full implementation of the “Government Accounting Standards System” in all administrative institutions in China in 2019, the idea of business-finance integration is particularly important in the construction of government accounting. The improvement of the efficiency and safety of the use of fiscal funds has become a key concern of government departments at all levels. This article explores the theoretical basis of the integration of industry and finance, and uses this as a guide. By analyzing the necessity and existing problems of the current government department's financial information sharing, this paper puts forward the construction ideas and suggestions for the government financial sharing center platform, which is beneficial to government departments to manage public affairs more effectively to better serve society and the public.

**Keywords**— Government Accounting; Business-finance Integration; Financial Sharing Center.

## I. OVERVIEW OF FINANCIAL SHARING

Financial sharing service is a management model that integrates enterprise groups dispersed in branches or subsidiaries with highly repetitive and easy-to-standardize financial services to the financial sharing service center for business process reengineering and unified standardized processing, thereby realizing information sharing. This model is conducive to controlling costs, improving efficiency, and enhancing customer satisfaction.

Similar to enterprise groups, the accounting entities of the first-level government of China use the fiscal at the same level as the aggregation unit to form a group organization that integrates revenue and expenditure budgets, treasury receipts and payments, and accounting. From the characteristics of the sharing center, the government is better equipped to implement financial sharing. The business similarities between government accounting units are high and the financial and accounting systems are highly unified, which is very conducive to business integration across agencies. However, due to technical and institutional factors, the practice of financial sharing has not been implemented, and most of them are still independent accounting and decentralized management.

## II. THE NECESSITY OF ESTABLISHING THE FINANCIAL SHARING CENTER OF GOVERNMENT DEPARTMENTS

### A. Transparent Information for Easy Management

The government financial sharing service center centralizes the accounting calculations of each unit, and the unit's business personnel and the center's financial personnel form a certain containment relationship. The financial personnel only need to perform objective accounting according to the actual economic and business conditions, and

the accounting information will become more authentic and transparent. The financial sharing platform centrally stores and manages the financial data of budget units at all levels, which effectively solves the problem of information asymmetry between higher-level management departments and budget units. The interconnection of various departments on the sharing center platform enables real-time online query and supervision of the accounting vouchers, general ledger and financial statements of various units by the competent departments, finance, auditing and other departments, so that it is easy to understand the financial status of each unit's asset and liability structure And carry-over of balances, to achieve coordinated online supervision of multiple departments, and improve the financial supervision of budget units. In addition, the government financial shared service center staff further selected from the original accounting team and new data experts can rely on a higher level of accounting information services to ensure that accounting entities and relevant departments improve management and decision-making.

### B. Concentrated Operations to Reduce Costs

Due to the large government accounting system and the large number of financial subordinate units at all levels, the current independent accounting financial model consumes a lot of manpower and material resources. But the establishment of the government financial sharing center can revoke the original financial institutions of direct units. One person is responsible for the basic work of document collection, sorting, and entry. Other tasks are centrally handled by the sharing center. In the sharing center mode, one person can be responsible for multi-unit account management, thereby greatly reducing financial staff and saving labor costs. At the same time, the centralized processing can realize the sharing

of information equipment, save institutional construction and daily maintenance funds, and save operating costs.

### C. Unified Accounting and Information Sharing

The financial accounting system operates independently in the financial accounting of the government's accounting entities, which prevents the sharing of information resources between units and forms an "information island." The problems of scattered financial data and inconsistent accounting calibers of various units have brought inconvenience to government departments in analyzing and using financial business data of various accounting entities. The unit's financial information system does not have a unified data sharing mechanism. Most types of financial data, statements, and reports are provided to higher-level departments by way of layer-by-layer reporting and level-by-level summary. It is easy to cause information to be distorted during data transmission and data summary inefficiency.

The government financial shared service center can realize real-time monitoring of business and real-time acquisition of information data through centralized processing of business and accounting. Other data users such as higher authorities, management, decision-making and other data users no longer need to query or report in the original accounting mode when they need to obtain data. They can log in by themselves. This not only makes the recording of financial data more open and transparent, but also no longer takes time and effort to obtain and summarize data, and enables information sharing across regions and departments.

### D. Standardize Processes and Increase Efficiency

The government financial sharing service center can integrate the first-level budget, revenue and expenditure, business procurement between government procurement and financial support units, and design standardized processes to achieve the purpose of reducing the traditional cumbersome procedures of approval and the influence of reputation factors in business processing. To achieve programmatic and standardized business processes. At the same time, this standardized processing mode can also break through information barriers and ensure the timely and effective transmission of information. It is very beneficial to the collection and query of information and improves the efficiency of business processing while ensuring the improvement of data acquisition rate.

## III. POSSIBLE PROBLEMS IN THE CONSTRUCTION OF THE GOVERNMENT FINANCIAL SHARING CENTER

### A. The Organizational Structure Needs to be Optimized

The government accounting system requires strengthening financial accounting functions, improving budget accounting functions, and integrating infrastructure accounting. In the original organizational structure, the asset management system was independent of the financial management system. It could not complete accurate calculation of operating costs, and could not fully reflect the unit's financial information and budget

execution information. Infrastructure accounting reconciliation is more difficult, and the organizational structure of the financial sharing platform needs to be optimized.

### B. Backward of Financial Software Integration Functions

The financial report output function lags behind, and the statistical summary data still needs to be manually queried; each of the independent data repositories used by the online appointment reporting system, accounting system, and salary system, etc., each system requires financial personnel to manually enter data repeatedly, and the information is not accurate, inconsistent and untimely; the budget system is unable to identify departmental projects that have been overrun, making budgetary expenditures not effectively controlled. The imperfect functions of financial software hinder the improvement of the efficiency of business processing and are not conducive to the construction of the government financial sharing platform.

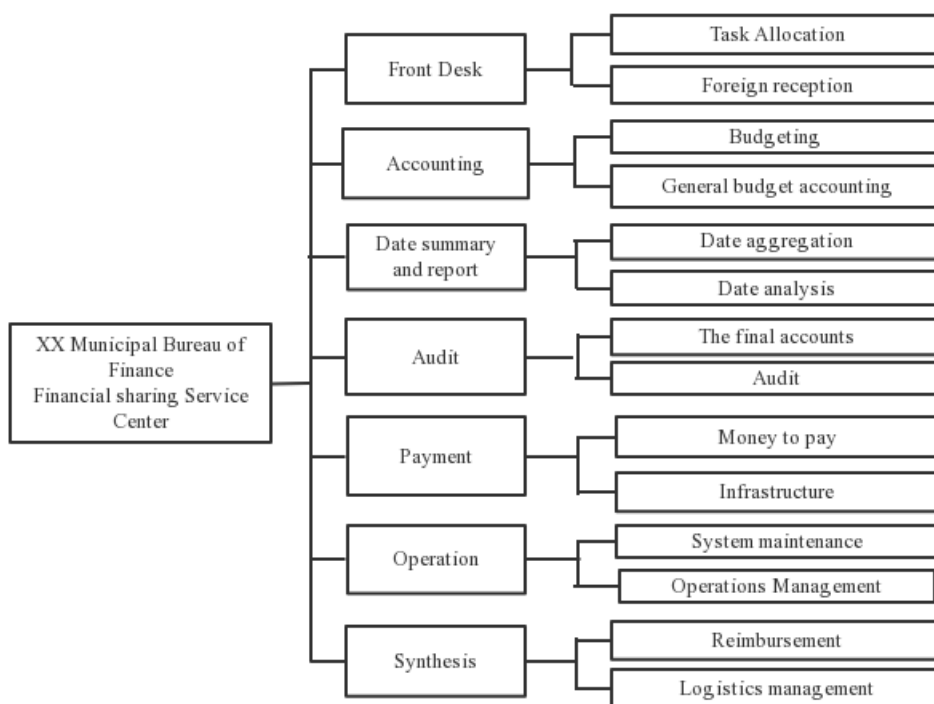
### C. Lack of Compound Financial Management Talents

The government accounting system not only raises higher requirements for the professional accounting ability of financial personnel, but also requires financial personnel to extract valuable financial information from the huge data for in-depth analysis, and provide important financial information for management and government departments. Financial staff must not only learn and master the content of the new system within a limited time, but also strengthen the information software operation skills! Improve their management capabilities! This poses an unprecedented challenge to the comprehensive quality of existing financial staff. At present, most government finance personnel have a professional accounting background, a single knowledge structure, and a low level of informatization operations. There is a lack of complex financial management personnel with both a high level of management and specialized knowledge and operations.

## IV. CONSTRUCTION OF GOVERNMENT SHARING CENTER PLATFORM

### A. Organizational Structure Optimization

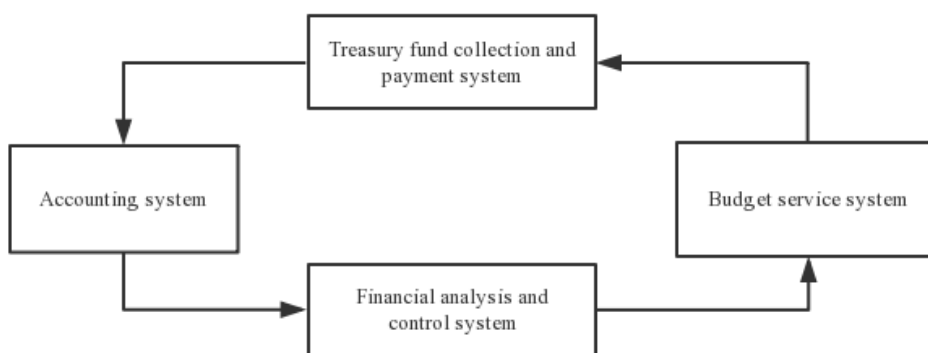
The organizational structure of the government financial sharing service center should adopt a flat top-down organizational management model, reduce intermediate management levels and complex approval levels. While strengthening communication between various departments within the sharing center, it is also effective to improve government entities and direct reports. The efficiency of communication between units enhances the timely and effective transmission of financial information. The organizational design of the government financial sharing service center includes seven departments: front desk, accounting, data summary and reporting, review, payment, operation and integration.



Picture 1: Government Finance Sharing Service Center Organization

At the same time, when building a financial sharing service center for government organizations in our country, we should not limit ourselves to the concentration of financial accounting and fund settlement activities. Instead, we should use information technology to build a sharing platform that incorporates all aspects of government organization's financial management into financial sharing services. The center, through big data and cloud computing to achieve deep

integration of data, better provide decision support for the management of government organizations. In terms of service content, the financial sharing service center organized by the Chinese government should include four systems: the treasury fund collection and payment system, the accounting system, the budget service system, and the financial analysis and control system, as shown in the figure below.



Picture 2: Structure of Government Shared Financial Service Center

### B. Work Flow Design

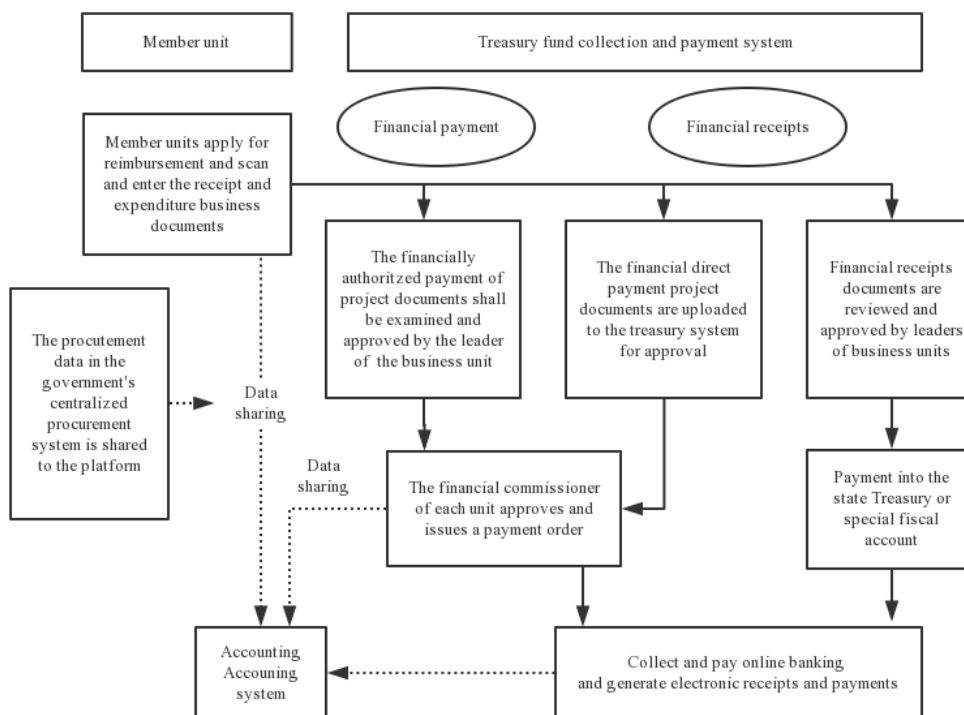
This article believes that the government organization financial sharing service center should use "financial management as the core and economic business as the main line" as the guiding principle to design the workflow. The working procedures of the treasury fund collection and payment system, accounting system, budget service system, and financial analysis and control system are explained in detail below.

#### a. Treasury fund collection and payment system

Under the centralized treasury collection and payment system, the fiscal revenue of each government-owned unit must be turned into the national treasury or deposited into a special fiscal account through the national single account system. Fiscal expenditures should be paid by the direct payment or authorized payment through the single treasury account system. The business process involves the work of the employer, the approver and the correspondent bank. The

treasury fund collection and payment system should take the treasury system as the core, integrate the government procurement system and the online banking system, and realize the electronic management of information from declaration, approval to payment. The related reimbursement

business documents should be stored on the sharing center platform in time and used. The data port communicates with the accounting system, budget service system, and financial analysis and control system, enabling data to be entered once and shared throughout.



Picture 3: Treasury fund collection and payment system workflow

Member units apply for reimbursement on the financial sharing service center platform according to the approved budget, and the reimbursement document information is entered by the financial report clerk of the unit, and the original document is uploaded and stored as an attachment to the reimbursement voucher to the system platform. The QR code is used as the reimbursement document Unique identification number to match with other data in the system. The processing of financial expenditure business is divided into the following two ways: First, the reimbursement documents for financially authorized payment items are reviewed and approved online by the heads of each member unit. After the approval is completed, the financial commissioner of the member unit generates an electronic payment instruction in the treasury system and transmits it to the online banking system of the designated bank; Second, the direct financial payment project is submitted to the treasury system for approval. After approval, the financial commissioner of the member unit generates an electronic payment instruction in the treasury system and transmits it to the online banking system of the agent bank. After online banking payment, electronic payment documents are generated and shared to the platform. The financial revenue business is subject to the online approval of business documents by the person in charge of the member unit through

the platform, which is deposited into the designated bank account after being reviewed by the financial officer of the member unit, and the bank automatically generates an electronic billing statement based on the receipt of the funds and transfers it to the sharing center platform. All documents are stored in the sharing center platform in the form of electronic information, which is directly identified and recorded by the accounting system.

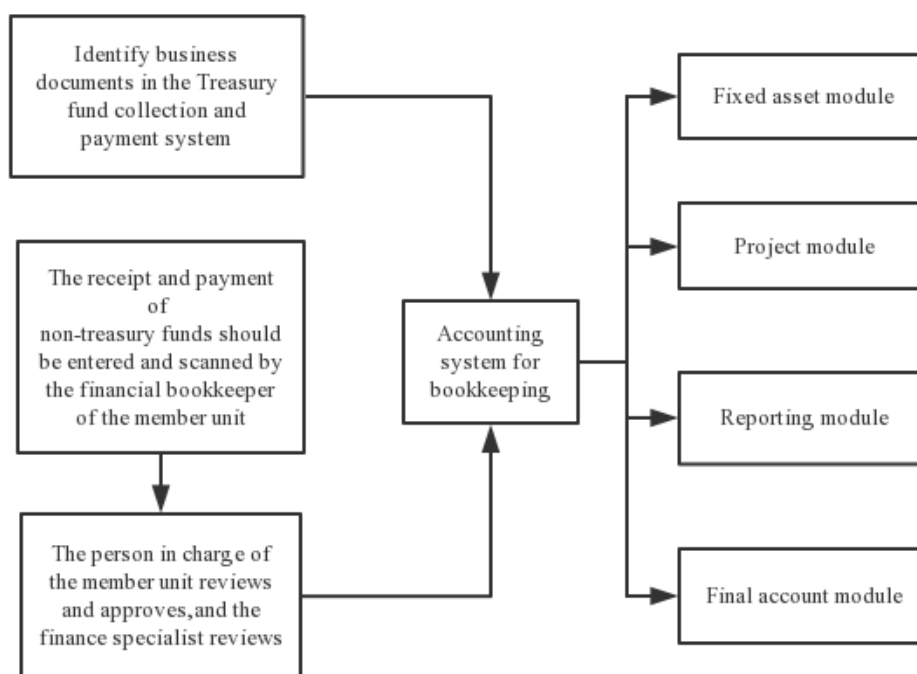
*b. Accounting system*

The accounting system should unify the accounting code, basic data entry, data classification, and data reporting format of member units. Since the members of the financial sharing service center of the government organization are independent legal persons, their centralized accounting and accounting have the essence of group companies. The difference. The financial sharing service center of a government organization shall, through consultation and communication with each member unit, formulate a set of universally applicable financial accounting standards and procedures, and ensure that similar businesses can be handled in accordance with relevant standards and frameworks without affecting each member. Unit financial independence. The workflow of the accounting system is shown below.

As can be seen from the figure above, the accounting system's work process includes the following three aspects:

① The image processing of the billing business. Since the treasury fund receipt and payment business data has been completed in the treasury fund receipt and payment system, the accounting system directly identifies the relevant documents. It can complete bookkeeping, while the non-treasury fund receipt and payment business is assisted by the financial bookkeeper of the member unit to fill in the billing documents, scan and file, and upload to the financial shared service center. ② The person in charge and the financial officer of the member unit conduct electronic approval and review of the uploaded original documents through the sharing center platform. ③ The accounting system reviews the

compliance and completeness of the approved electronic documents, and records according to the type of business, and generates accounting statements and final accounts. The accounting system improves the efficiency of accounting and the classified management of accounting information by establishing different accounting modules. For example, the fixed asset module mainly reflects the fixed asset situation of member units in time by establishing a fixed asset ledger (fixed asset electronic card). The reporting module is responsible for generating financial accounting reports (including consolidated reports), and the final accounting module is responsible for generating final financial reports.



Picture 4: Workflow of accounting system

### c. Budget service system

The budget service system meets the needs of member units for budget management by standardizing the budget preparation format and the budget preparation process. The workflow of the budget service system is shown in the figure below.

The budget service system workflow includes the following four aspects:

① During the budget preparation stage, the financial specialists of the member units upload the budget indicators, budget expenditure standards, requirements, and performance targets and other information that the unit has issued to the sharing center platform. Second, the budget service system refers to these materials and uses the platform's big data. Predictability, helping member units to formulate a guiding annual budget report; again, the financial commissioner of the member unit downloads the guiding annual budget report through the platform, and uses this as a reference to prepare the annual budget report of the unit and transfer it to the

sharing center platform; Approved by the relevant departments online, the approved budget data is stored in the shared platform information system; finally, the budget service system decomposes the annual budget report monthly for review by member units.

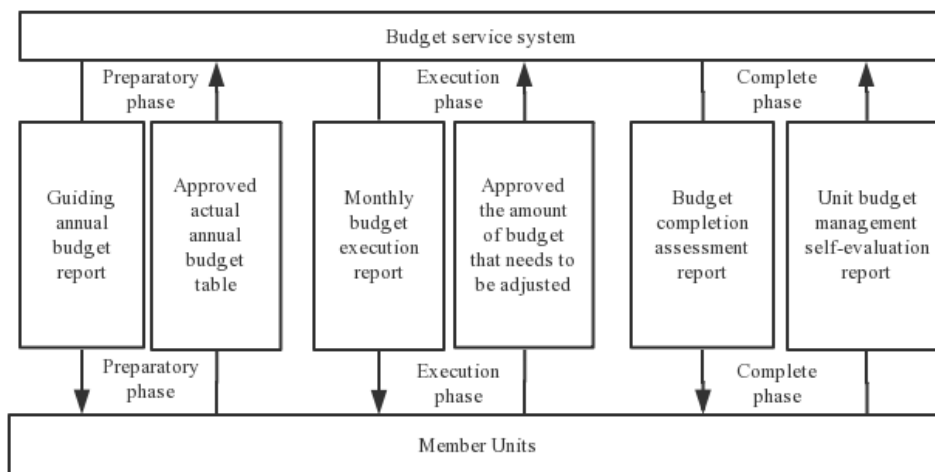
② In the budget execution stage, the budget service system uses intelligent technology to match the budget execution with the budget report, so as to realize the real-time monitoring of the budget execution, and prepare the monthly budget execution report on a monthly basis and pass it to the member units through the shared center platform. The financial commissioner of the member unit performs self-evaluation based on the implementation of the monthly budget. If the existing budget needs to be adjusted, the adjusted budget will be uploaded to the sharing center platform for online approval by relevant departments. After approval, it will be re-archived and covered. Original budget data.

③ In the budget completion stage, the budget service system will help member units to design and establish budget



evaluation indicators based on the actual situation of the member units, use intelligent technology to match the indicators with the completion of the corporate budget, and prepare a budget completion evaluation report for sharing through the platform. For reference of member units. The

financial specialists of member units conduct self-evaluation based on the completion of the budget, and form a report to upload to the sharing center platform to provide a reference for the preparation of the next year's budget.



Picture 5: Budget service system workflow

#### d. Financial analysis and control System

The financial analysis and control system assists member units in establishing and improving internal control processes and preparing financial analysis reports in accordance with the needs of member units. It mainly includes the following two aspects:

(1) Help member units to establish internal control processes that are integrated with actual business, clarify the responsibilities of financial personnel and business personnel of member units, and implement internal control mechanisms that restrict and check each other. For example: in the management of fixed assets, the financial analysis and control system will help member units to formulate corresponding fixed asset management systems in accordance with relevant national regulations, and clarify the division and authority of responsibilities in the process of procurement, approval, payment and acceptance of fixed assets; The asset inventory work is standardized, the responsibilities of fixed asset inventory are clarified, and reconciliation is performed in a timely manner. The method of uniformly installing tracking chips on fixed assets can also be used to track real-time changes in the location of fixed assets in order to find idle fixed assets in a timely manner and improve fixed assets. Asset utilization efficiency.

(2) Based on the shared central platform database and the use of multi-dimensional database technology, different types of financial analysis reports are generated according to the needs of member units, such as debt analysis reports, receivables aging analysis reports, long-term investment and income analysis reports, and government reserves. Situation analysis report, etc. In addition, the platform's big data can be used to discover the financial risks of member unit operations and generate corresponding risk warning reports. The financial

commissioner of a member unit can download relevant reports from the platform, find out the internal control defects of the unit in time, and improve the efficiency of financial management.

#### C. Industry-Finance Integration Protection Scheme

The ultimate goal of building a financial sharing platform for government departments is to provide fast, effective and comprehensive data information and effective data analysis for government decision-makers. The continuous deepening of industry-finance integration will help optimize and upgrade the financial sharing platform. In order to better serve the government, management must strategically attach great importance to the construction of the platform, unify the management thinking, and clarify the business-finance integration thinking. As the core part of management, the financial department must take the lead in combing all business and financial processes. Combined points, formulate various financial business process specifications, cooperate with departments to unify data collection formats, and build a unified database platform. While ensuring effective information transmission, strengthen data management and control to ensure the smooth construction of financial sharing platforms and improve business processing. effectiveness.

##### a. Clear integration

The construction of the government financial sharing platform is a huge and continuous optimization process, which is the continuous sorting out and transformation of all financial services. The effective transfer of data and the realization of system integration between various business departments are inseparable from the deep integration of "industry-finance integration". Only decision-makers and management can fully realize the auxiliary role and synergy of

financial work to various business work, and clarify the idea that business-finance integration is the booster of information construction, can they mobilize the enthusiasm of various departments and overcome local obstacles to benefits, Promote the integration of industry and finance, and promote the development of financial sharing services.

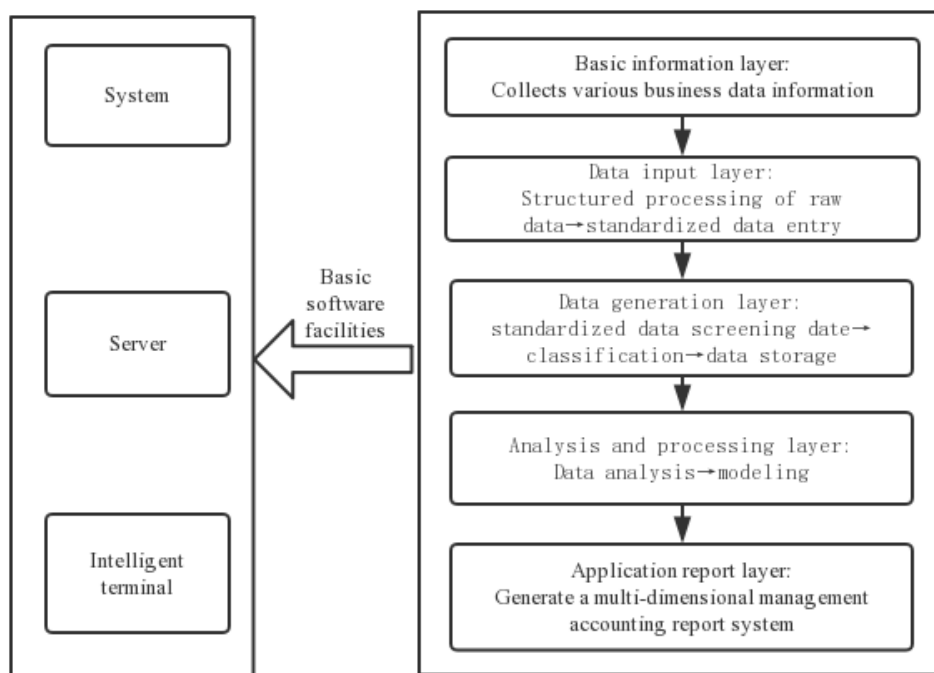
*b. Unified data caliber*

The imperfect interface between the business management system and the financial management system of each department and the inconsistent data caliber lead to a low degree of data exchange. The financial department cannot process and analyze the data scientifically and reasonably, which is not conducive to the optimization and integration of government business. As the standardizer of data standardization, the financial department should formulate easy-to-understand standardized operation guidelines, standardized operation procedures, and a unified data standardization template. When setting parameters for the new system, the finance department can coordinate with other departments to unify the information coding, project codes,

and account codes of the government's basic data to avoid information islanding in the new system; for the old business system data, it should be converted into finance Unified standards set by the sharing platform.

*c. Building a data platform*

Because the application systems of most government departments in China are independent but have relatively complete functions, abandoning and developing new application systems will cause great waste of resources. Therefore, building a unified database platform has become the preferred solution to achieve industry-finance integration. In order to integrate and integrate the existing data and take into account the construction of new systems in the future, the old information systems of various departments need to be highly integrated technology fusion, unstructured data is standardly structured, and semi-structured data is processed. Restructured and incorporated into the database, to ensure that the original data information is not distorted, data in various storage forms and heterogeneous system data can be integrated into a unified database platform.



Picture 6: Government unified data processing framework

V. CONCLUSION

Based on the related theories of financial shared services and the construction experience of financial sharing service centers of enterprise groups, this paper has conducted an exploratory study on the construction of financial sharing service centers of Chinese government organizations, and has reached the following conclusions: Governments at all levels need to organize financial management, provide financial sharing services for units that should be included in the scope of consolidation of government financial reports at the same level, and use modern information technology to conduct

financial fund settlement, accounting, budgeting, and financial analysis. Process reengineering enables the concentration and integration of business and financial activities to provide support for government organizations' financial management decisions, thereby improving the quality of financial information disclosure and the efficiency of financial management in government organizations.

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