Analysis on the Information Management of Social Security

Wang Han\(^{1*}\), Liu Longzhu\(^{2}\)

\(^{1}\) Researcher, State Grid Energy Research Institute Co., Ltd., Beijing, China
\(^{2}\) Corresponding author’s e-mail: wanhan@sgeri.sgcc.com.cn

Abstract. The social security undertaking is a relatively complicated and large-scale social system project. It requires multiple government departments to cooperate with each other and participate in management. Therefore, problems such as poor information communication, unclear division of duties, and improper data storage are inevitable. And the management agencies caused a lot of inconvenience. Many insured people could not receive insurance benefits on time due to various reasons, which caused inconvenience to the people’s life and increased social unrest factors.

1. Introduction
The construction of social security system requires the application of computer information technology to build a platform system, transmit security information, improve the management efficiency of the security system, integrate security information, share information resources, and achieve healthy economic development and stable social operation. The process of building a social security system is also a process of promoting the informatization of social security management. In the process of social security construction, avoiding the division of administrative management and realizing the sharing of credit information resources is an important issue to be solved in the construction of social security system, and also an important issue to be solved in the process of promoting the construction of social security system by informatization.

The main content of social security informationization is to combine information technology with social security business and build a social security management information system. This system is composed of computers, communication networks, databases and corresponding computer software, as well as various professional technicians. In the entire social security management informationization work, database work is extremely important. It is the basis for the survival of social insurance agencies and an important part of social insurance management. The practice in recent years has fully proved this. In recent years, due to the high attention paid by the state and localities to data and information and the investment in data information systems, the level of social security data management has been significantly improved.

With the rapid development of information technology, information management has become an important trend in the world's economic and social development. Information construction has occupied an important position in all walks of life. With the acceleration of the construction of the social security system, the application of information technology in the field of social security has received increasing attention. The promotion of information technology into social security management has become an important part of the construction of social security management system. Informatization is the technical support of the entire social security system. It involves all levels of the social security system and also runs through all aspects of social security work. This is to improve service methods, increase work
transparency, improve decision-making levels, and accelerate the scientific process of social security. Has a very important meaning and role.

2. The necessity of informationization of social security management

2.1. The informationization of social security management is the need to improve the level of macro decision-making

China's current macroeconomic decision-making in the field of labor security relies mainly on routine statistics, investigations, and research, and it is still lacking in terms of completeness, timeliness, and accuracy. Inaccurate data and poor feedback channels have seriously affected macro decision-making. The social security informationization is conducive to the comprehensive, timely and accurate collection and reflection of the progress of social security projects, so as to effectively monitor and early warning, provide timely policy parameters, and provide a true and reliable basis for scientific decision-making and policy formulation.

2.2. Informatization of social security management is the need to strengthen fund supervision

In recent years, it has been common to misappropriate social security funds, report social insurance contributions, pay less social insurance premiums, defraud or violate social insurance premiums. It has seriously violated the legitimate rights and interests of the atrocious people and reduced the ability of the fund to pay. It has seriously affected China's economic development and social stability. Social security informationization can provide technical guarantee for fund supervision, reduce human interference during business management, strengthen the standardization and institutionalization of fund collection, payment and management, and improve the transparency of fund operation by social insurance fund supervision departments. To ensure the safety of fund management and ensure the safety and integrity of the fund. To protect the legitimate rights and interests of the insured.

2.3. Social security management informationization is the need to adapt to changes in personnel mobility and overall level

With the continuous development of China's economy, the number of insured persons moving across the co-ordinated areas, medical treatment in different places, and the number of elderly people in different places have been increasing year by year. Through the national unified, standard-consistent, network interconnection, information sharing social security information system, the establishment of a national centralized social security fund database and the remote relationship transfer data exchange area can support the flow of people across regions, cross-regional pension, cross-regional The business handling of medical treatment in the region has enabled these businesses, which are difficult to complete under manual conditions, to be carried out, bringing the level of social insurance management to a new level and meeting the needs of personnel mobility.

3. Principles of social security management informationization

3.1. Economic principle

At present, the interval between computer technology update is shorter, the software upgrade speed is faster, computer network and communication technology are also developing at a high speed, and users and subsystems are constantly increasing. The consumption of upgrading software and replacing equipment is generally high. Therefore, in the process of informationization of social security management, it is imperative to blindly pursue high-tech, and at the same time find more economical and practical software upgrade methods to save money.

3.2. Coordinating principle

In order to make the division of labor and cooperation of various departments and prevent the problems of separate administration, decentralized construction and redundant construction, we must adhere to
overall planning. The information software system should be developed by the central unified organization, and deployed, implemented and promoted according to the principle of centralized data collection and decentralization. Standardize all working procedures, use unified data standards and technical standards, and lay a solid foundation for the final establishment of a national unified social security information management network platform to ensure that social security information resources from the source to the application always meet the requirements of information sharing.

3.3. Key principle
The design of the plan must conform to the law of information development and the direction of social security development. On the one hand, we must focus on the needs of social security, application as the core, and data as the basis. It is necessary to put the practical application of the business first, uniformly standardize data collection, and provide correct information data. On the other hand, adhering to the principles of construction, application, and effectiveness, it is necessary to timely transform construction results into realistic administrative management capabilities.

3.4. Safety principle
System design and construction should put anti-interference, anti-aggression and anti-risk in a crucial position, strengthen management and ensure system security. It is necessary to handle the relationship between information disclosure and security and confidentiality, establish a sound security protection system, implement system security and security access control in all aspects and at multiple levels; establish a security detection and monitoring system, establish a virus prevention system, and establish important applications. Redundant backup and disaster recovery of the system and key host systems to ensure system security, network operation security, and data storage security.

4. Suggestions on social security informationization countermeasures

4.1. Strengthen hardware investment
To build a fast and smooth network system, it is necessary to increase the investment of hardware and purchase various equipments required for building a platform, such as computers and data input tools. These hardwares are the basis of social security management informationization. Without these hardware support, there is no way to talk about social security management informationization.

4.2. Strengthen hardware investment
The current social security information management is scattered and cannot be shared. It has affected the government's decision-making, efficiency and public image. In order to adapt to the continuous expansion of the social security field, the continuous complexity of management decisions, and the constant changes of service targets, the existing society Safeguard information and management resources, sequence and organize according to more scientific and rational methods, to achieve the sharing of information resources in existing organizations or in a wider scope, data interconnection and mutual access, management and technology matching, to meet Manage the needs of different levels of information resources, and maximize the value of existing information resources and networks. With the increasing turnover of personnel and the increasingly unified development trend of labor security services, social security management information systems are increasingly demanding harmonization. The national social security management information system software platform should be created and implemented nationwide. In this way, the exchange of social security data and the transfer of security fund accounts will be resolved, and it will also be beneficial to the national macro-coordination management. The establishment of the data repository includes the gradual transition from the establishment of the resource database to the online information exchange, clarifying the vertical relationship within the relevant departments and the horizontal connection between the departments, and solving the statistical problems through network scanning to achieve automatic data collection. By
providing data analysis and processing for macro decision-making, it avoids problems such as the independence of each system and the inability to share information.

4.3. Strengthen the training of information technology personnel
At present, the quality of social security management personnel is uneven. In order to meet the needs of the continuous development of social insurance work, the labor security system needs to establish a technical backbone team that understands both information technology and business work, and masters a large number of familiar policies. A compound talent for computer applications. Relevant departments should also allocate certain training funds. The social insurance management departments at all levels must select personnel with certain computer and network basic knowledge to form a competent information team.

4.4. Planning and designing social security management information platform
In planning and design, we must take into account the status quo, solve the current urgent needs, but also focus on the long-term, to maximize the future integration of the system, and gradually build all social security services, covering all social security management departments and agencies. covering the “big system” and “big platform” of all social security objects. In terms of business, it is necessary to increase the intensity and standardization of business requirements, proceed from the overall business needs of social security, and focus on and standardize the business processes and interrelationships between existing business systems and new development systems. Second, realize the "three integrations" and effectively bring into play the overall benefits of the social security information management system.

4.5. Standardization and use of unified social security cards
The social security card is mainly a tool that uses IC technology to realize the collection, identification, sharing and exchange of social security information between laborers and employers, and is also an exchange interface between cardholders and social security information management systems. With the increase of social security management objects and the increase of business scope, the amount of data doubles, and the social security information system covers the breadth, long-term and basic content of the content, so that it has a record of life, management, and The characteristics of serving a lifetime. We should standardize and use the unified social security card that passes through the country as soon as possible. The design of social security card should be based on the principle of “one card multi-use, nationwide pass”, integrating voucher function, inquiry function and information record function, covering the fields of labor security, medical insurance, housing accumulation fund management, etc. There are various types of information of users, and each card is connected with multiple accounts of the user's pension, medical care, housing, etc. It is the "electronic voucher" and "key" for people to enjoy the public service information system, and is also a certificate for off-site and online services. The function and information of the social security card should also be consistent with the existing ID card information such as ID card, which can not only provide the cardholder with various information services, but also enable the manager to fully grasp the status of the client. Understand the cultural standards and employment trends of various groups of people, make predictions based on the accumulation of data, and be able to grasp the number of changes in the number of users, the number of people, the content, the concentration, etc. through the system operation, to understand the people’s concerns and encounters. And existing problems, find weak links in service work, and improve the level and ability of government scientific management and correct decision-making.

4.6. Standardization and use of unified social security cards
In accordance with the "standard first" construction idea, the information exchange and business linkage interface and data exchange standards between departments will be formed as soon as possible, and the business norms for information sharing and collaborative work will be established. On the basis of perfecting the national computer local area network system, the provincial labor security departments
establish a computer local area network system to realize some provincial-level Internet interconnection, and then gradually realize the provincial-to-one (city) remote communication for social security services. Unification lays the foundation. In addition, the metropolitan area network should be built on the basis of the central city. If there is no condition, the logical network can be built first, but in the end, a centralized database should be realized in the central city to realize data networking and process social insurance information in real time. In turn, the sharing of data resources based on the central city is realized to adapt to the development of various services and the rapid growth of data volume, and to solve the data reading and conversion between different platforms.

5. Conclusion

5.1. Social security informationization moves from decentralized construction to unified centralized construction

Since China promoted the “Golden Insurance Project” in 2003, social security informationization is moving from decentralized construction to unified centralized construction. Objectively, the Chinese people need a combination of five risks, and they need to share the nationwide network. The need for employment in different places, medical treatment in different places, and receiving pensions from different places is very strong. At present, Jinbao Engineering has made great progress and good development in data center construction, network engineering construction, unified software application, etc. The awareness and implementation of information system unified construction have been significantly improved, and the application of system construction has been improved. The effect has begun to appear. The construction and application of information systems have played a positive role in optimizing management service models and improving labor security management capabilities and service levels. This unified trend puts forward higher requirements for social security informationization. "Unified construction" will become the fundamental tone of social security information construction in the future.

5.2. Social security IC cards will be widely used nationwide

The social security card is an important part of the implementation of the national unified labor and social security information system project. It promotes the gold card project and the gold guarantee project. Under the joint promotion of these two gold projects, the current Chinese IC card is in the social security field. It has been widely used and has achieved good social and economic benefits.

For IT vendors, the ability to provide continuous and effective follow-up services has become an important criterion for customers to measure the value of IT vendors. The nature of the social security industry is special. Whether its information system can operate smoothly and effectively is directly related to the pension of retirees, and the medical insurance services of employees are related to the immediate interests of citizens. The demand for services in the social security industry is very high, and the frequent adjustment of policies makes the provision of IT operation and maintenance services essential. In the future, with the comprehensive construction of social security information construction, the demand for IT services will become more and more vigorous. The provision of high-quality services has become an important part of the competition among manufacturers. This has become the consensus of IT vendors.

For the social security information department, the future support for the operation of IT systems must also be improved. At present, the requirements of the business department for the information technology department remain at the technical service level, and there is a lack of integration, coordination and promotion between business and technology. In the coming period, the social security informationization department will strengthen the construction of the information team. Strengthen the training and introduction of required technical talents and management talents, improve the overall quality of the information team; optimize the informationization working mechanism, provide effective technical support for business expansion and data application; undertake the construction and improvement of standards and norms, and revise or formulate major business system indicator systems.
such as social insurance, formulate interface specifications for off-site business systems, and optimize business processes.

References
[1] Chen, Y. (2009) Analysis on the Construction of China's Social Security Management Information System. Social Work, 7: 60-62.
[2] Li, X.H. (2008) Several problems in establishing a national social security information management platform. Shandong Social Sciences, 8: 52-54.
[3] Zhang, L. (2006) Talking about Strengthening the Construction of Social Security Information. Modern Management, 5: 127-128.
[4] Lu, Q.S. (2007) Constantly strengthen the information construction of the social security system. Consumer Guide, 10: 247.