Analysis of Enterprise Data Security Management Path from the Perspective of Big Data in the New Era

Fubao Zhang

Zichuan District Statistics Bureau, Zibo 255000, China.

Abstract: With the rapid development of modern network information，the Internet of Things has entered the homes of ordinary people. Data has become one of the factors driving social and economic development, and data is becoming increasingly important for enterprises and society. This article mainly considers the enterprise data security management from the eight dimensions of enterprise data collection, data quality, data processing, data evaluation, data development and application, data supervision, data storage, data release and dissemination. The purpose is to establish a perfect enterprise data security management framework, find the problems in the current enterprise data security management, and put forward feasible suggestions from different aspects.

*Keywords:* Data; Safety; Management; Dimension

1. Research background

Currently, various countries are strengthening data resource integration and security protection. Exploring the establishment of a unified and standardized data management system, improving data quality and standardization, and enriching data products. Research on improving the nature of property rights based on the nature of data. Develop a data privacy protection system and security review system. Promote and improve the data classification and classification security protection system applicable to the new era of Big data environment, and strengthen the protection of government data, business secrets and personal data. Many countries have also established scientific and standardized data security classification and grading management work through laws and regulations, clarifying the data classification and grading directory.

2. The significance of enterprise data security management

Enterprise data security management is one of the construction projects for high-quality development of enterprises, playing an important role in cost saving, market expansion, and future development. Data is an essential and important component in the development of the entire enterprise, responsible for various management and successful launch of product results. Data quality is the foundation and the key, while data development and storage are the results. The implementation of these functions must have data security management in order to achieve them. Without data security, empowering enterprise development with data is just empty talk. Enterprise data security management is the cornerstone of the healthy and orderly development of the entire enterprise, and also has important significance for the harmonious development of the entire society.

3.Taking a production industrial enterprise as an example to construct a data security management framework system
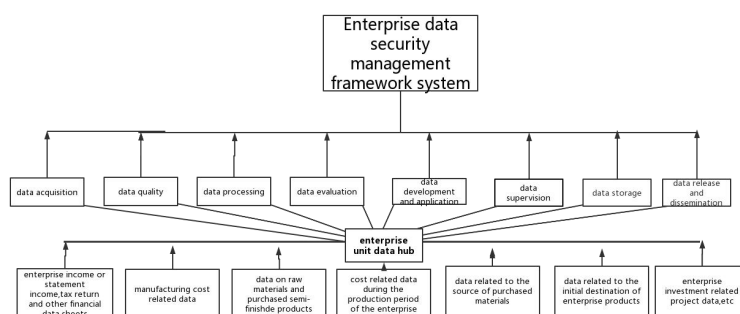
4. There are currently issues with enterprise data security management

Enterprises are an important component of the overall socio-economic development, and they are the producers and providers of social data. With the arrival of the new era and the intensification of informatization, there are still shortcomings and problems in their data collection, storage, use, processing, transmission, provision, disclosure, archiving, destruction and other related work.

4.1 Enterprises have weak data quality and report system account management when providing daily services to social functional departments

Enterprises are unwilling to provide truthful and reliable data due to concerns that society will grasp the entire actual situation of the enterprise, which is the source of data security management and results in a lack of foundation for data security management.

Due to frequent changes in data providers provided by enterprises, there are accounts without real names or zombie accounts that have not been used for a long time. It can also cause enterprise data insecurity. 3.1.2 Irregular data caused by accounting Moneylender agents will also cause data security problems. Some companies use proxy companies to fill in various types of data in order to save costs. The security of proxy companies is not standardized, or the account management of third-party management personnel is relatively loose and non-standard, and there is a lack of account supervision, which can cause a crisis in enterprise data security.

The lack of personnel responsible for data security management in enterprises and the lack of emphasis on data security management in enterprises. Most enterprises have almost no dedicated data management and development personnel, and data security management personnel often work part-time in other jobs. They are often busy dealing with various tasks, neglecting to categorize, organize, store, and develop applications for the data reported by enterprises, or throwing it into the trash can after a period of time without timely archiving and categorizing it.

The data corresponding to various departments of the enterprise and the summarized data of the enterprise have issues such as decentralization, lack, confusion, and feedback lag. Enterprise procurement, production, inventory, sales and other related data are not centralized and relatively scattered. There are also missing or even errors in the data of important indicators or key issues required by the main enterprise leaders. This makes enterprise data feel chaotic, inconsistent in scope, and very passive. These issues have a negative impact on grassroots data security management.

5. Feasibility suggestions or measures for enterprise data security management
5.1 Strengthen the management system of data archives to ensure the security of stored data

Enterprises should make archive informatization an important part of their data security management work, clarify responsibilities, and do a good job in archive digitization.

Establish and improve systems for archive data security and confidentiality, electronic file archiving, and archive data transfer, to achieve centralized and unified management of various categories and carriers of electronic archives.

Improve software and hardware facilities, equip specialized computers, scanners, printers, and other terminal equipment and

auxiliary equipment that meet the requirements of digital archive construction, and effectively ensure the realization of the main functions of digital archive collection, management, storage, and utilization.

Safe storage and backup system for digital archives, ensuring the safe storage and backup of directory databases and digital archives, equipped with dedicated storage equipment, and maintained and managed by dedicated personnel to ensure the security of archive data.

Implement the requirements for managing confidential archive data, strictly distinguish between confidential and non confidential, and assign personnel and positions to manage confidential digital archives to ensure the security of confidential archives. Prepare for the transfer of digital archives. According to the requirements of the archives administration department, do a good job in archive backup work to ensure that when the entry period is reached, while transferring traditional carrier archives, timely transfer of digital copies and electronic archives should be done.

Enterprises should give full play to the advantages of Big data, and digital intelligence integration presents data empowerment. Fully utilize modern technological means and the Internet of Things technology, with one image, one screen, and several microcomputers, to perfectly present the data situation of various departments required by the enterprise. Actively promote the integration of enterprise electronic ledger construction, so that the data sources of various departments of the enterprise are consistent, based on consistent, and moving towards consistency.

Enterprises sign network and data security responsibility agreements with data security management personnel. Data security work follows the principle of "who manages the business, who manages the business data, who manages data security", in accordance with relevant national and provincial regulations and standards, combined with the actual situation of the enterprise unit, establishes a data security responsibility system, implements data classification and grading protection, and ensures the safety of property. It supervises and guides the data security work of enterprise system statistics institutions. Strengthen the full process management of important statistical data, strictly follow the requirements to carry out daily management and security protection of network systems, terminal computers, servers, and computer information systems.

Strengthen the awareness of enterprise data confidentiality. Enhance the national security and confidentiality awareness of enterprise data personnel, enhance their national security and data confidentiality awareness, enhance their sense of responsibility and urgency in data confidentiality work, and build a strong defense line for confidentiality. The confidentiality discipline of enterprise data front is the lifeline of enterprise survival. Enterprise data security management personnel should fully recognize the severity and complexity of the current confidentiality work situation, always tighten the "confidentiality" string, and enhance the sense of responsibility and urgency of confidentiality work. We must firmly establish a solid defense line for enterprise data security, and strictly fulfill confidentiality obligations for data reported by enterprises in various departments, such as purchase, production, sales, and investment; We must strictly implement the approval system for the disclosure of enterprise data information, and without approval, no enterprise data information may be released to the public.

Enterprises should strengthen data management in various departments and improve the quality level of data empowerment. Enterprises should truthfully present financial indicators, raw material purchases and inventory, semi-finished products, initial product destinations, and various expenses, and conduct rigorous and meticulous data review and proofreading to ensure the scientific, accurate, and convenient nature of the data.

Enterprises should improve the efficiency of data services. We should be good at capturing the focus and direction of enterprise products and market demand in data application development, and further improve the pertinence and effectiveness of data services. We need to ensure the security of enterprise networks and data. Adhere to prioritizing enterprise network and data security, fully implement enterprise network and data security responsibilities, and work together with offices, finance, supply, warehousing, and other departments to carefully implement the network and data security regulations and work arrangements of the national security department to ensure network and data security.

Enterprises should attach importance to talent cultivation and strengthen the construction of data security management and development teams. On the one hand, enterprises should actively cultivate and recruit data security management personnel. On the other hand, the government should help and assist enterprises in building a high-quality data management talent team. Enterprises

strive to cultivate comprehensive talents who can independently undertake analysis, research, data organization, and data editing for every data security management personnel.

6. Conclusion

At present, although there are certain problems and weaknesses in enterprise data security, with the improvement of rules and regulations, hardware facilities and software environment are gradually equipped, and the dilemma of enterprise data security will also be greatly improved. With the increasing awareness of data confidentiality, the pursuit of seeking truth from facts, and the improvement of the rule of law, it is believed that in the near future, the data security environment will be greatly improved. Enterprise data security management will empower data in a new stage of development and provide a solid guarantee for high-quality economic development.

References

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