

New Driving Force of University Financial Governance based on Big Data

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Abstract

The advancement of modern information technology and the change of data-driven decision-making have become a major trend in the development of the new era. Data has had an unprecedented impact on the way of thinking, organizational decision-making, and technical methods of college governance, and it has also given traditional college financial governance processes and methods. Brings new changes. With the theme of new kinetic energy, it focuses on describing how university financial governance gains new kinetic energy in the era of big data, and attempts to study the use of big data to reconstruct internal operations and organizational interconnections to promote the modernization of university governance capabilities. The application of new technologies and new methods in the era of big data will undoubtedly effectively promote intelligent governance, precise management, and scientific decision-making. This is not only a strategic choice for the modernization of financial governance in universities, but also a new driving force for high-quality development.

Keywords

Big Data; Financial Governance; New Driving Force.

1. Introduction

In the modernization process of smart campus construction, many college finance companies have gradually realized the seamless connection of cross-departmental, cross-level, cross-field, cross-campus offline business and online online data; in promoting information flow, technology flow, business flow and In terms of the orderly flow of capital and talents, big data exerts the unique advantages of flat, fast, efficient, and interactive platform networks; while decentralization, hierarchization, and boundaryzation, it quickly realizes the efficient integration and integration of different resources. Equal dialogue; in terms of advancing organizational integration, mechanism integration, business integration and data integration, it has initially realized the connection and intercommunication of financial needs and services, and funds and projects. Big data technology, which occupies the central area and commanding heights in the information flow of colleges and universities, is constantly changing the extensive and empirical traditional financial processes in broader fields and larger-scale applications. In the future, the high-level evolution of university finance will face new features such as "high-speed ubiquity of broadband networks, comprehensive perception of intelligent environments, deep integration of business applications, intelligent analysis of massive data, and personalized and convenient intelligent services" at the technology and application level, which foreshadows the entry of information technology. After a higher stage of development, it will inevitably provide more direct technical support for financial governance and business integration and innovation, thereby forming a continuous driving force for advancing governance modernization [1].

2. Analysis

The "burst" of massive and diverse data in the era of big data indicates that it has entered a stage where data is becoming more and more difficult to process. In terms of governance thinking, methods, and decision-making behaviors, big data is also increasingly affecting the formation of new kinetic energy for university financial governance [2].

2.1. Impact on governance thinking in the era of big data

The emergence of big data and the choice of data-driven decision-making have changed the way of thinking, which in turn leads to methodological changes, which ultimately manifests itself in a profound impact on governance behavior.

2.2. Impact on governance methods and means in the era of big data

Focusing on user needs, centering on data, discovering new knowledge and information through the processing and analysis of massive data, reflecting new characteristics that are completely different from the past, which reflects the transformation from hypothesis-driven to data-based decision-making, and objectively promotes Changes in governance methods and means.

2.3. Impact on governance decision-making behavior in the era of big data

Only by making full use of the large-scale and diverse characteristics of big data in practice can it be possible to extract the true value of big data. When observation, perception, simulation, calculation, simulation and other behaviors become more and more common, while expanding the scale and types of data, many unacceptable data in the past are also included. These new data provide a basis for scientific decision-making in governance activities, and at the same time, more data generated by decision-making provides the possibility for new discoveries.

3. Constraints

3.1. Constraints of ideas and ideas

The influence of big data on the way of thinking is universal and irreversible. The traditional holistic, intuition, vague, and experience-driven way of thinking is in contrast to the precise and rational thinking under the conditions of big data. Nowadays, the big data thinking and the examination under the big data view are towards more complex multi-source objects, which requires the financial department of colleges and universities to use big data to conduct research and judgment analysis on multi-source objects, so as to establish a new governance model that conforms to the characteristics of the times.

3.2. System and mechanism constraints

Big data is a systematic project involving many departments and many levels. At present, the communication and sharing of information between various departments in most colleges and universities has not yet been fully realized, and the division between different levels and departments has formed a physical separation of the system. There is a lack of effective cross-university and cross-administrative collaborative governance and information communication mechanisms between different universities and between universities and society. In the fields of financial security, campus safety, and teaching security, the pattern of multiple co-governance among universities has not yet formed; Internally, there is a tendency toward departmentalization and fragmentation of governance, one-sided emphasis on data security and confidentiality and the cost of data reorganization, resulting in a factual situation of unwillingness, unwillingness, fearlessness, and inability to share, forming artificial "data islands" [3].

3.3. Talent bottleneck restriction

The whole process of decision-making, planning, organization, coordination, construction and supervision and other complicated affairs within universities requires people to solve governance problems with the help of big data. Under the current system, the financial department personnel are generally not capable of using big data, and lack of talents who understand both building data computing models and financial business. The gap with IT companies in terms of salary and benefits has also exacerbated the attraction of excellent interdisciplinary talents to engage in related work. The difficulty. Insufficient talents make the level of familiarity with business work and processes far from enough. In the process of financial governance, it is easy to cause problems such as the disconnection of supply and demand and the difficulty of effective supply. Many financial departments have not yet realized the importance of scientific evaluation and continuous iterative development of informatization construction applications. They lack the necessary evaluation index system and mechanism for project performance. Project construction often has a certain degree of blindness, arbitrariness, and subjectivity, which affects To the effect of financial governance.

3.4. The shackles of the business environment

The quality of university financial governance depends on the real-time and completeness of basic information, which all depend on the level of unification and coordination of the top-level specifications of the campus network environment. At present, some colleges and universities lack top-level design and overall planning of basic data. Basic business systems such as finance and educational administration have repeated construction. The differences in standards and rules of different business systems have also caused dispersion and redundancy in data storage. Although most university data centers have initially realized simple basic data and some business data circulation, storage and query functions, it is still difficult to meet the needs of cross-system and cross-department analysis and judgment [4].

3.5. Safety protection clamp

Big data is like a double-edged sword. While bringing convenience, the data security and privacy protection issues it causes are becoming increasingly prominent. Many of the personal information of teachers and students involved in university financial data needs to be safely kept and protected. However, in reality, many universities store this information like other ordinary data in the school server, which lacks an independent security protection mechanism. Worry about sex. At the same time, with the development of information technology and AI, big data thinking and model "mutations" have quietly changed everyone's study life.

4. Strategy

4.1. Seek the overall situation with a strategic vision and cultivate endogenous development ability

Financial governance in the era of big data focuses on strategic planning, and uses the new advantages of big data to empower colleges and universities with new financial governance. First, we must have a new goal concept. Adhering to the essence of the big data culture in the new era, with fine governance and performance leadership as the starting point, and the goal of openness, tolerance, cooperation and sharing, and establishing a new university financial work mechanism of "data orientation, data decision-making, data governance, and data services", Realize the transformation of management decision-making from "business-driven" to "data forecasting"; establish the concept of balanced development of university informatization, unified planning, overall construction, and overall promotion for the whole school to achieve intelligent perception, intelligent application, forecasting and early warning,

accurate service, and service The "data consumption" behavior of teachers and students has become the main driving force for governance. Second, we must support the new platform. Use new technologies such as big data, the Internet and artificial intelligence to achieve organic integration with financial governance mechanisms, so that mobile applications can achieve the advantages of anytime, anywhere, portable, shared, open, and interactive, and support frontline financial personnel to "three follow" data resources Invoke the demand to realize the "online" and "real-time" of financial governance. The third is a new development model. It is necessary to gather the power of the whole school, gather the wisdom of the whole school, discuss and build together, and participate in the process of financial governance informatization, and truly let the new thinking of "crowd creation, crowdsourcing, crowd funding, sharing, and co-governance" be in the majority of teachers. Rooting and sprouting in the birth, promote the financial model to intensive, high-efficiency, and shared transformation, to inject new momentum into the high-quality financial development in the era of big data.

4.2. Cohesive force with systematic thinking and pursue maximum value

Governance is a systematic project involving management, information construction and other fields within universities. Therefore, the financial department must follow the development trend of modern technology, and strive to promote the deep integration of modern technology such as big data, mobile internet, cloud computing and artificial intelligence with the development of universities, and reshape the internal organization and operation of the related form. At the same time, for the diverse needs of cross-department, cross-campus, and cross-group, accelerate the progress of financial intelligence construction, and realize the data sharing, service linkage, mutual trust and mutual recognition between universities and departments through system thinking. Organize the entire cloud network, build a strong cloud computing, explore cloud intelligence, build a cloud shield, integrate into the larger pattern of smart campus construction, and provide high-quality data services and more data protection. Use the massive data of the school's main data center to carry out financial statistical analysis and data mining, extract valuable and relevant "full data" from it, aim at difficult hot spots, pay close attention to key links, consolidate the foundation of data empowerment, and optimize data empowerment methods , To build a strong data empowerment node, to promote finance from a higher level to maximize the value of data in highly integrated, in-depth mining, and extensive application, and work together to improve decision-making capabilities and execution efficiency.

4.3. Defining boundaries with scientific and technological procedures to strengthen data security

It is necessary to strengthen the top-level planning of various types of campus data from the university level, establish a unified data standard system, and achieve integration, sharing, and openness and transparency. Implement the governance power and responsibility system and clarify job responsibilities: the financial department, as the leading department in financial governance, actively opens up financial data, establishes a data cross-analysis model, and carries out project evaluation; the technical department establishes a unified data center, builds a data sharing platform, and improves data sharing mechanisms ; The project execution department or personnel shall improve the management and use of funds and implement the data standard system. Attaches great importance to data security and personal privacy protection. Based on the mainstream distributed computing environment in which the financial system is located, standardize data system standards and interfaces, strengthen the design of data security protection mechanisms, and encrypt, desensitize, and desensitize necessary core and real-time data. Monitoring, auditing, and data backup, recovery, and other operations, using methods such as underlying data encryption, disk encryption, and drive-level decryption technology to prevent data leakage from the source. Explore the formation of a set of

standardized construction standards and operating mechanisms, clarify the responsibilities of departments in data collection, storage, classification and exchange, grasp the standards of open data and safeguard the privacy of teachers and students, and ensure its accuracy, completeness and consistency sex.

4.4. Increase vitality with openness and innovation, and highlight the modernity of service

The focus of university financial governance is to stimulate vitality, build a management system with reasonable procedures, complete links, and openness and transparency; the goal is to enhance the well-being of teachers and students, participate in management affairs, and implement the requirements of innovation-driven and performance-first throughout the entire governance process. Therefore, the concept of data openness should be strengthened, and a mechanism of "data decision-making, data empowerment, data management, and data creation" should be established to realize data-based decision-making, execution and feedback. It is necessary to subdivide the needs of teachers and students from multiple dimensions and levels, and make full use of the precise, efficient, and comprehensive correlation analysis function of big data to provide technical support for the diversification of financial services; take demand as the guidance, and actively promote the "supply side of college finance" through process reengineering. Reform" to increase the degree of funding guarantees, thereby improving service methods and optimizing the allocation of financial resources; innovating more efficient data applications and smart application models, highlighting financial reimbursement services, non-face-to-face approval, and other business functions that benefit teachers and students. Can flexibly and conveniently obtain services according to needs and regulations, and share data dividends. Through data empowerment, we strive to make financial development reflect more clear characteristics of the times and have higher-quality scientific and technological connotations.

4.5. Strengthen the foundation with talent guarantee and promote transformation and modernization

In the era of big data, the scope of financial work in colleges and universities is not limited to traditional fields, but extends to teaching, scientific research, and human resources. Data related to financial work may become an important part of financial work. In the future, the scope of work of financial personnel will no longer be limited to departmental management, but will provide effective financial management for development based on the overall university and support the all-round sustainable development of universities. Therefore, it is necessary to reform the current training system, establish a new training model, focus on cultivating financial personnel's big data thinking, fully explore their big data analysis and application capabilities, and integrate the construction of core financial information talents into the overall deployment of university talent construction. In China, it is necessary to train a group of financial professionals who are suitable for the era of big data with the training goal of "wide-calibre, thick foundation, and strong ability".

5. Conclusion

In the era of big data, the changes in governance thinking, methods, and behaviors caused by technological progress have not only spontaneous motivation, but also external pushes, interacting with each other, making traditional management present new characteristics of change under the support of big data technology. Thereby promoting the new development of financial governance in colleges and universities. Facing the future, college finance must make full use of the favorable conditions brought by the new momentum of the big data era, and

continue to explore and advance on the path of modernization of the internal governance system of colleges and universities.

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