

## Reconstruction of the Rights and Responsibilities and Coordination Mechanism of University Administrators in Cross-Departmental Data Sharing

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**Keywords:** Cross-Departmental Data Sharing; University Administration; Rights and Responsibilities Reconstruction; Coordination Mechanism; Data Governance; Administrative Management; Digital Transformation in Higher Education

**Abstract:** In the digital age, the development of universities is increasingly dependent on the effective use of data, and cross-departmental data sharing has become a key link in improving the management efficiency and scientific decision-making of universities. However, in this process, university administrators face numerous problems, including unclear responsibilities and difficulties in coordination. This paper focuses on cross-departmental data sharing. First, it expounds on the relevant theories of cross-departmental data sharing and university administration, analyzes the current situation and problems faced by university administrators in this context, and proposes a strategy for reorganizing responsibilities and a plan for establishing a collaborative mechanism. This study aims to provide a reference for university administrators to better adapt to data sharing and improve the overall management level of universities.

### 1. Introduction

Affected by digitalization, all walks of life are undergoing profound changes, and the field of higher education is no exception. As a crucial position for knowledge dissemination, scientific research, and talent training, colleges and universities generate and accumulate increasingly large amounts of data. These data encompass teaching, scientific research, management, and student services, and are crucial strategic resources for the development of colleges and universities. Cross-departmental data sharing can break the information barriers between departments within colleges and universities, realize the circulation and integration of data, and thus provide a more comprehensive and accurate basis for college decision-making, improve management efficiency, and promote innovation in teaching and scientific research. In this context, college administrators, as the main participants and promoters of data sharing, face new challenges and reconstruction needs in their power and responsibility system and coordination mode. In the past, college administrators worked under a relatively independent departmental structure with a relatively fixed scope of power and responsibility. However, cross-departmental data sharing requires administrative managers to assume more diverse responsibilities and have corresponding powers in the collection, organization, sharing, and use of data. Moreover, they need to collaborate with personnel from other departments. Therefore, it has become an urgent need for colleges and universities to reconstruct the power and responsibility of college administrators and build an effective mechanism to promote data governance and achieve high-quality development. This study will use literature research methods and logical analysis methods to deeply explore the specific strategies for reconstructing the rights and responsibilities of university administrative managers and the construction methods of collaborative mechanisms for the cross-departmental data sharing, to provide universities with practical solutions to the management problems in data sharing and promote the administrative management level of universities to a new level.

## **2. Theories Related to Cross-Departmental Data Sharing and University Administration**

### **2.1 Theoretical Basis for Cross-Departmental Data Sharing**

Data sharing refers to the process of exchanging, transferring, and utilizing data between different subjects according to certain rules and methods. In the university, cross-departmental data sharing is a unique phenomenon. From the perspective of characteristics, university data encompasses a wide range, including student information, faculty information, teaching resources, scientific research results, and financial data, resulting in extensive data sharing. At the same time, the teaching arrangements, scientific research project progress, and student management are highly time-sensitive, which requires data sharing to be carried out in a timely and rapid manner, reflecting timeliness. In addition, university data often contains sensitive information, such as student privacy and scientific research secrets, so there is a need to consider security and confidentiality when sharing data [1].

Cross-departmental data sharing is of great significance to the development of colleges and universities. First, it can break down the information islands between departments, allowing each department to obtain relevant data from other departments, thereby avoiding obstacles caused by information asymmetry and improving overall work efficiency. Second, the analysis and mining of shared data can provide a more scientific basis for college decision-making, ensuring that decisions are more aligned with the actual situation and development needs of the school. For example, when formulating an enrollment plan, it is possible to comprehensively consider the faculty, teaching resources, and employment situation of each major and make more reasonable arrangements. Furthermore, data sharing is conducive to optimizing the resource allocation of colleges and universities, investing limited resources in the most needed areas, and improving the efficiency of resource utilization [2].

### **2.2 Overview of University Administration Theory**

College administration encompasses the activities of organizing, coordinating, supervising, and providing services for various aspects of the school to achieve the educational and teaching goals of colleges and universities, guided by established rules, regulations, and management principles. Its functions mainly include organizational, coordination, and service functions. The organizational function refers to the reasonable establishment of organizational structure and the clarification of the division of responsibilities of various departments and personnel; the coordination function refers to the coordination of the relationship between departments and personnel within the school to ensure the orderly development of various tasks; the service function refers to providing necessary guarantees and services for teaching and scientific research activities to meet the reasonable needs of teachers and students. The goal of college administration is to ensure the normal operation of the school, improve the efficiency of school operations, promote the overall development of the school, and cultivate more high-quality talents that meet the needs of society [3].

From the perspective of organizational structure, the most common administrative management in universities is the bureaucratic structure, characterized by a clear hierarchy, defined rights and responsibilities, and strict rules and regulations. In terms of operating mechanism, work is typically carried out according to a top-down instruction transmission and a bottom-up information feedback process. However, this structure and operating mechanism also have some problems, such as obvious barriers between departments, each department often pays more attention to its own work goals and lacks overall collaboration awareness; the management process is relatively cumbersome and the decision-making efficiency is not high; the response to market and social needs is not sensitive enough, etc. These problems have restricted the development of universities to a certain extent. Figure 1 is a schematic diagram of the administrative management structure of Gujarat Maritime University.

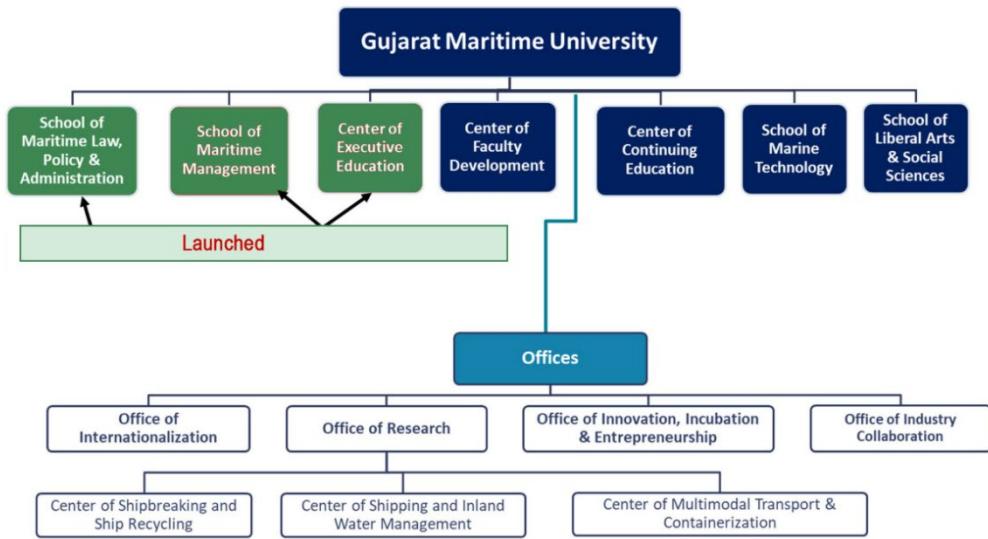


Fig. 1 The structure of Gujarat Maritime University

### 3. Analysis of the Current Situation of University Administrators in the Cross-Departmental Data Sharing

#### 3.1 The Professional Characteristics of University Administrators and the Impact of Cross-Departmental Data Sharing

The work of college administrators is tedious because they need to handle a variety of daily tasks, including document drafting, meeting organization, data analysis, and information dissemination. These tasks require meticulousness and patience. At the same time, they need to provide guidance and support for teaching and scientific research to ensure that all work aligns with the school's overall planning and requirements. In addition, college administrative management work is holistic. The work of various departments is interrelated and mutually affects one another. Problems in any link may affect the overall operation of the school. Moreover, since all the school's work has clear time nodes, the work of administrative personnel is highly time-sensitive [4].

Cross-departmental data sharing has had a significant impact on university administration. On the positive side, data sharing enables administrative managers to quickly obtain all the necessary data, reducing the time required for data collection and organization, and thereby improving management efficiency. For example, when evaluating students for awards and honors, information such as students' grades, attendance, and volunteer services can be quickly obtained on the data sharing platform, greatly shortening the selection process. At the same time, data sharing promotes innovation in teaching and scientific research. Administrative managers provide shared data to teachers and researchers to support their teaching reforms and scientific research projects. Additionally, analysis based on shared data enables administrative managers to more accurately understand the school's operating conditions and make informed decisions.

However, cross-departmental data sharing also brings some negative effects. The most prominent risk is to data security. In the process of data sharing, inadequate security measures can lead to the leakage of sensitive data, including students' personal information and teachers' scientific research results, resulting in losses to the school, teachers, and students. Additionally, different departments may have their interests. During the data sharing process, conflicts of interest may arise due to issues such as data ownership and usage rights, which can impact the progress of data sharing [5].

#### 3.2 Current Status and Problems of University Administrators in Cross-Departmental Data Sharing

Through questionnaire surveys and interviews with university administrators at several institutions,

we found that participation in cross-departmental data sharing is gradually increasing among university administrators. Increasingly, universities are paying attention to data sharing and establishing corresponding data sharing platforms. Administrative managers have also gradually recognized the importance of data sharing and actively participate in uploading, querying, and using data. Some universities have also established special data management departments to coordinate data sharing among departments, and administrative managers frequently communicate with these departments.

However, there are still many problems in actual operation. First, the rights and responsibilities are unclear. Administrative managers often lack a clear understanding of their rights and responsibilities in the data sharing process. For example, in terms of data access rights, they are not clear about which departments' data they can access, as well as the scope and extent of access; in terms of data quality, it is unclear how much responsibility they should bear for the accuracy and completeness of the data provided, which makes it difficult to hold them accountable when problems arise. Second, there are difficulties in coordination. Due to the different work priorities and goals of various departments, administrative managers lack effective communication and collaboration in cross-departmental data sharing. There are often data barriers between departments, or various obstacles are set up during the sharing process. Poor communication channels and the transmission of untimely and inaccurate information also affect the efficiency of collaborative work. Ultimately, many administrative managers lack essential data processing and analysis skills, as well as an understanding of the value of data. They struggle to effectively utilize shared data in their work. When confronted with a large volume of data, they often struggle to filter, organize, or analyze it. Extracting valuable insights is challenging, which ultimately affects the overall effectiveness of data sharing [6].

## **4. Strategies for Restructuring the Rights and Responsibilities of University Administrators**

### **4.1 Necessity, Significance and Principles of Restructuring Power and Responsibility**

As cross-departmental data sharing in colleges and universities deepens, the traditional system of rights and responsibilities for college administrators has become insufficient to meet current work demands, necessitating a reevaluation of these rights and responsibilities. The original division of rights and responsibilities is based on the traditional departmental structure and work model. It lacks consideration of the data sharing link, which leads to problems in the data sharing process and affects the efficiency and quality of data sharing. The reconstruction of rights and responsibilities clarifies the role and position of administrative managers in data sharing, solves the current unclear rights and responsibilities, and enables them to better adapt to the data sharing environment [7].

Reconstruction of authority and responsibility is of great significance to improving the management efficiency of colleges and universities. A clear division of authority and responsibility will enable administrative managers to clarify their work scope and responsibilities, and improve their enthusiasm and initiative in their work. In addition, clear empowerment can enable them to work more effectively in the process of data sharing and improve the efficiency. In addition, reconstruction of authority and responsibility helps establish and improve the accountability mechanism, so that when problems arise, the responsible party can be identified promptly, prompting administrative managers to treat data sharing work more cautiously and ensure the security and quality of the data.

The reconstruction of power and responsibility must adhere to specific principles. First, the principle of legality is the primary principle; that is, the division of power and responsibility must comply with relevant national laws and regulations, as well as the rules and regulations of colleges and universities, and cannot exceed the framework established by these laws and regulations. Second, the principle of rationality requires that the division of power and responsibility align with the work abilities and tasks of administrative personnel. Third, the principle of clarity emphasizes that the expression of power and responsibility must be clear and specific, and administrative personnel must be clear about the scope of their power and responsibility.

## 4.2 Specific Strategies for Restructuring Responsibilities

Clarifying the list of powers is a crucial part of redefining powers and responsibilities. Administrative managers should have the right to access specific data from relevant departments based on their work needs. However, these access rights should be strictly limited based on job positions and responsibilities to prevent data abuse. At the same time, they should have certain decision-making power and make reasonable decisions regarding the scope, method, and frequency of data sharing, based on the actual work situation. In addition, administrative managers should also have coordination rights. When conflicts and problems arise during the data sharing process between different departments, they need to coordinate and resolve them to ensure the smooth progress of data sharing.

Additionally, it is crucial to clarify the list of responsibilities. Administrative managers are responsible for ensuring the accuracy of the data provided. They must carefully check and verify it before uploading it to ensure that the data is accurate and reliable. In terms of data security, they must strictly adhere to data security management regulations, take necessary security measures to prevent data leakage, loss, or tampering, and bear corresponding responsibilities for data security incidents caused by their actions. In addition, it is necessary to ensure the timeliness of data sharing, uploading, and updating data according to the specified time and requirements, and ensuring that other departments can obtain the required information promptly.

Establishing a dynamic adjustment mechanism is crucial to ensuring that the rights and responsibilities system can adapt to changes. With the development of colleges and universities and the increasing depth of data sharing, the types, quantities, and sharing needs of data will change. Therefore, it is necessary to regularly evaluate and adjust the rights and responsibilities of administrative personnel, and adjust the corresponding rights and responsibilities accordingly to meet actual conditions. For example, when new data types or work tasks emerge, it is necessary to promptly clarify the rights and responsibilities of administrative personnel in related aspects. Similarly, when certain data is no longer needed to be shared or the work process changes, adjustments should also be made. Establishing a dynamic adjustment mechanism can ensure that the rights and responsibilities system is always adapted to the data sharing work of colleges and universities, ensuring its scientificity and effectiveness.

## 5. Construction of a Collaborative Mechanism for University Administrators

### 5.1 Importance and Principles of Collaborative Mechanism Construction

The construction of a collaborative mechanism is of great significance for cross-departmental data sharing in colleges and universities. It breaks down information silos between departments, promotes information exchange and resource sharing among administrative personnel from various departments, enabling them to work towards common goals and improve work efficiency. Through the collaborative mechanism, administrative personnel from different departments can cooperate and support one another to form a working synergy, avoiding duplication of work and waste of resources, and achieving efficient attainment of the overall goals of colleges and universities. For example, when carrying out enrollment work, administrative personnel from the enrollment department, the academic affairs department, and the student management department collaborate closely through a joint mechanism to ensure the smooth progress of enrollment and improve its quality.

The construction of the coordination mechanism should follow the principle of goal consistency, that is, the coordination of administrative personnel of various departments should be carried out around the overall development goals of the university, ensuring that all work serves the overall situation of the university and avoids deviation from the overall goals due to departmental interests. The principle of communication effectiveness requires the establishment of smooth and efficient communication channels to ensure that information can be transmitted between administrative personnel of various departments in a timely and accurate manner, reducing communication barriers and misunderstandings. The principle of resource sharing emphasizes that, in the process of coordination, data, technology, human resources, and other resources should be shared to maximize

the benefits of these resources.

The framework design of the collaborative mechanism should encompass an organizational structure, effective communication channels, and efficient coordination mechanisms. In terms of organizational structure, it is recommended to establish a cross-departmental data sharing collaborative working group, with relevant school leaders serving as group leaders and administrative personnel from various departments as members, responsible for coordinating cross-departmental data sharing efforts. Communication channels can be categorized into two main types: online and offline channels. Online, a special data sharing communication platform can be established, such as WeChat groups, QQ groups, internal office systems, etc., to facilitate administrative personnel to exchange information at any time; offline, regular coordination meetings can be held to allow personnel from various departments to communicate face-to-face about work progress and existing problems. The coordination mechanism should clearly outline the process and rules governing collaborative work. When contradictions and conflicts arise, they should be coordinated and resolved by the prescribed procedures to ensure the orderly progress of collaborative work.

## 5.2 Implementation of the Coordination Mechanism

Building online and offline communication platforms is the basis for promoting collaboration. It is recommended that the online platform use existing information technology to develop a special cross-departmental data sharing and communication system. The system should have functions such as information release, message push, file transfer, and online discussion to facilitate administrative personnel in obtaining information and communicating promptly. At the same time, it is necessary to ensure the security and stability of the online platform to prevent information leakage and system failures. The offline platform can provide administrative personnel with face-to-face communication chances by setting up special communication venues, such as conference rooms and negotiation rooms. It is necessary to regularly organize cross-departmental work exchange activities, such as seminars and symposia, to foster a positive communication atmosphere.

Improving the coordination and cooperation process is the key to ensuring the orderly progress of collaborative work. It is necessary to formulate a detailed cross-departmental cooperation process to clarify the responsible parties, work content, and time nodes of each link. For example, in the data sharing application link, the administrative personnel of the demand department applies, stating the type, purpose and time requirements of the required data; after receiving the application, the administrative personnel of the data providing department shall review it within the specified time, and provide the data as required after the review is passed; if the review fails, the reasons shall be fed back in time. At the same time, it is recommended to establish a work log to record progress, track and supervise work that is not completed on time, and ensure that all work is completed on schedule.

Strengthening training and cultural construction can enhance the collaborative ability of administrative managers. Through specialized training, administrative managers can enhance their communication, collaboration, and data literacy skills, enabling them to master the methods and techniques of collaborative work. The training content can include the art of cross-departmental communication, the importance of teamwork, the use of data processing software, etc.

## 6. Conclusion

This paper examines the reconstruction of rights and responsibilities, as well as the coordination mechanism, for university administrative personnel in the context of cross-departmental data sharing, and draws the following conclusions. Currently, cross-departmental data sharing has become a growing trend in university development. The original rights and responsibilities system and coordination methods of university administrative personnel can no longer meet the needs, as evidenced by problems such as unclear rights and responsibilities and difficulties in coordination. Through the analysis of relevant theories, the characteristics and importance of cross-departmental data sharing, as well as the functions and organizational structure of university administration, are clarified. On this basis, this study proposes a strategy for reconstructing rights and responsibilities, including clarifying the list of powers, defining responsibilities, and establishing a dynamic

adjustment mechanism to ensure ongoing adaptation. In addition, it establishes a coordination mechanism, involving the development of a communication platform, enhancement of cooperation processes, and strengthening of training and cultural development.

This study has certain limitations. Due to time and resource constraints, the generalizability of the research conclusions may be somewhat restricted. Research could broaden the scope of the survey by including a more diverse range of universities for empirical investigation. Additionally, the researchers should further assess the effectiveness of the power and responsibility reconstruction strategy and coordination mechanisms. This approach could provide more comprehensive and effective support to university administrators, thereby improving university data governance.

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