

# Exploration into the High-Quality Development of University Student Association Management Empowered by Digital Intelligence

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**Abstract:** *In the era of big data and artificial intelligence, starting from the development trend of empowering university management with digital intelligence, a dedicated platform for student association management is established using cloud computing platforms, artificial intelligence technology, Internet of Things, etc., provide support for the management of student associations in terms of training of members, organization of activities, assignment of duties, skills instruction, motivation of members, and cultural promotion., and to promote the optimization and upgrading of management efficiency and quality of management work in the new era.*

**Keywords:** Digital intelligence empowerment; Student association management; High-quality development; Innovation.

## 1. INTRODUCTION

To further improve the quality of management of university student associations, guided by the talent cultivation concept of "three comprehensive education" and "five simultaneous education", big data deep learning algorithms are fully utilized to mine, integrate, and manage information resources of student associations. In the operation and development of associations, intelligent management is carried out for modules such as association cadre cultivation, distribution of duties, activity organization, business training, and association culture propaganda, and an online management platform is constructed to promote the transformation of student association management.

## 2. NEW REQUIREMENTS FOR THE MANAGEMENT OF UNIVERSITY STUDENT ASSOCIATIONS UNDER THE BACKGROUND OF DIGITAL INTELLIGENCE EMPOWERMENT

### 2.1 The Development of Digital Technology Drives the Digital Intelligence Transformation of Management Concepts in University Student Associations

In the context of the new era, the rapid development of cloud computing platforms, artificial intelligence technology, and the Internet of Things has made the idea of "empowering the future with digital intelligence" a reality. Actively applying digital intelligence technology to assist in the digital transformation of university administrative management and student association management has become a new trend, which also puts forward new requirements for the student association management department of universities.

In the context of digital empowerment, the management of university student associations no longer adheres to the concept of "self-management and self-service", but should be in line with the development goals of the associations and the needs of association members. In particular, it requires the management to transform the management concept of relying on "subjective experience for judgment", introduce data-driven, modular management, and collaborative sharing models into specific student association management work, highlight the value and efficiency orientation of digital intelligence management, and promote the development of association management work towards high quality, high efficiency, and intellectualize.

### 2.2 Digital Technology Promotes the Upgrading of the Construction of Student Association Management Platform

In recent years, domestic universities have established "one-stop" student communities, built online service

platforms for student communities using emerging Internet technologies, enabled campus governance with digital intelligence, and incorporated student associations into campus online service platforms for management. By using the online service platform and Internet groups, universities have realized the integration of information resources of student associations and the networked development of activity organization and management [2]. To refine the management of student associations and broaden the coverage of student association management work, universities can use big data mining technology and in-depth analysis algorithms to build a professional intelligent management platform for student associations and give full play to its advantages of refinement and upgrading, to optimize the allocation of resources for associations and management of associations' members, and to help the student association management department to improve management effectiveness in daily work and achieve "visualization" management of associations' data.

### **3. DEFICIENCIES IN THE MANAGEMENT OF UNIVERSITY STUDENT ASSOCIATIONS**

Through literature review and research interviews, the author found that most university student associations have made full use of the new media platform to obtain resources, and have established systematic communication channels using Internet groups. However, most universities are still applying the traditional management model for the association cadre cultivation, activity organization, distribution of duties, business training, and association culture propaganda, and the following management problems are prevalent:

#### **3.1 The Management Mode of Student Associations Cannot Meet the Actual Needs**

At present, the student association management mode, which is dominated by the Youth League Committee of Universities, and the Student Association Management Department, focuses on ideological and political education, regularly carries out ideological and political education for student associations' cadres and members, and the Student Association Management Department carries out the management and supervision of the daily work of the student association, mainly to convey and assign work tasks, and submit results after the student associations independently completes them. This top-down "moral education" student association management model uses theoretical knowledge to guide the associations to carry out self-management, but the effect in practice is not satisfactory. The reason is that it failed to help the cadres of student associations understand the deep connotation and logic of "association self-management", and the lack of practical guidance, which leads to the current difficulties in adapting the management of student associations to the requirements of high efficiency and refinement in the digital age.

Firstly, under the guidance of the fundamental task concept of "foster virtue through education", university student associations place more emphasis on "moral education" and emphasize overall management. This has led to a lack of "self-management" awareness in some student associations' management practices, resulting in these associations relying too much on overall management at the university level and reducing their self-management abilities. However, with the emergence of more emerging student associations, the current student association management model is no longer suitable for the needs of new associations. Secondly, in response to the psychological needs of student association members and the demands for digital and professional development, it is necessary to introduce and apply the concept of digital intelligence to upgrade the existing student association management model.

#### **3.2 The Management Mechanism Construction of Student Associations is Not Perfect**

In the era of digital intelligence, student associations lack a diverse and collaborative management mechanism. Firstly, universities have not established an association management machine led by the "Student Association Management Department + Guidance Teachers + Student Associations". Usually, the Student Association Management Department (which is under the jurisdiction of the university Youth League Committee) plays a leading role in formulating student association management systems. When formulating the organizational construction, association registration, member responsibility allocation, guidance teacher allocation, activity management, and other system contents of student associations, it tends to set them up from a macro perspective, failing to fully consider the differences between different types of student associations. As a result, the system cannot fully cover the management needs of student associations during implementation, leading to the poor articulation of the Student Association Management Department in guiding, coordinating, and supervising student associations.

### **3.3 The Construction of Student Association Management Platform and Talent Team Lag Behind**

At the present stage, the support mechanism for building a student association management platform is inadequate, as most universities are facing financial constraints and fail to provide sufficient funds for building an independent and complete online management system for student associations [3]. Usually, the online management system for student associations is integrated into the overall online management system of universities, which may result in the deletion of some functional templates in the association management system and reduce the management efficiency of the system. In addition, a large amount of information will be generated in the process of planning and implementing student association activities and students' participation in association activities. Traditional manual Excel and Word report statistics methods alone are difficult to meet the needs of association activity data statistics. However, current student associations are limited by various reasons and find it difficult to establish an online management platform that meets these needs on their own. In particular, most universities have not yet introduced the B/S (Browser/Serve) and C/S (Client-Server) architectures in their student association management system, nor have they established a modular window covering a series of association management functions such as training of members management, activity organization management, responsibility management, skills instruction management, incentive management, and cultural promotion management. This has led to low levels of informatization and insufficient data utilization in student association membership management and business management [4].

Association management is systematic and continuous work, however, due to the reasons of the mobility of association instructors and student association members (the general mobility cycle is 1 year), instructors and association members want to carry out the business operations on the association management platform proficiently need some time, and at the same time, the platform also needs professional personnel to carry out regular maintenance, to ensure that the platform operation quality and efficiency, which requires that universities to form a specialized team of student association management personnel.

### **3.4 There are Deficiencies in the Management Process and Work Assessment System of Student Associations.**

Deficiencies in the design of management standards and processes related to university student associations can constrain the integration of information resources and the enhancement of management effectiveness. Some universities only rigidly move their offline management mode to online during the student association management process, without using the advantages of the online management mode to carry out digital and intelligent processing of association work resulting in low efficiency of association management. In addition, the construction of assessment systems for the work of student associations is insufficient, in particular, the existing assessment system for the development of student associations tends to be more inclined to make a "formalized" summary of their work on a quarterly or annual basis, which is not conducive to the dynamic management of student associations and the inability to identify work problems on time.

## **4. THE PATH OF EMPOWERING HIGH-QUALITY DEVELOPMENT OF UNIVERSITY STUDENT ASSOCIATION MANAGEMENT WITH DIGITAL INTELLIGENCE**

### **4.1 Introduce the Concept of Digital Intelligence in Student Association Management**

Universities should actively use digital technology in the management of student associations, educate and train student association managers and association cadres, change their traditional management concepts, and lead the student associations to carry out management work such as organizing, coordinating, motivating, and supervising based on the concept of digital intelligence management. Based on the concept of Digital intelligence management, in terms of student association organization and coordination, big data technology can be used to analyze the data of association members (e.g.skill labels, activity level, etc.), establish prediction models to accurately locate the target students for recruiting new students, and use the campus network, WeChat public number and other channels to push information, as well as match new students with the most suitable association positions through AI(Artificial Intelligence) algorithms to reduce the cost of time. In terms of student association incentive supervision, associations can use machine learning to build statistical models to statistically analyze data on association members' frequency of participation in activities, quality of task completion, and skill training, which can be used as a supportive basis for association member ability assessment and as a reference for the qualification

of future association cadre selection. Another point is that BI (Business Intelligence) tools can be used to generate reports on the effect of student association activities and to guide them to optimize activities. The above methods can help student associations enhance awareness and ability of “self-management” in management practice and adapt to the requirements of high efficiency and refinement of student association management.

#### **4.2 Optimizing the Management Mechanism of Student Associations Based on the Concept of Digital Intelligence Management**

Currently, the management of student associations in universities should comply with the development trend of “digital media integration and digital intelligence empowerment”, further optimize the management mechanism of student associations, and take “data-driven decision-making, intelligent dynamic regulation and control, and accurate resource matching” as the core concept, and optimize the management mechanism of student associations from four dimensions: organizational structure, collaboration process, incentive mechanism, and supervision system.

First, it optimizes the organizational structure of student associations to achieve dynamic hierarchical and categorical governance. Based on the historical data of student associations, train random forest algorithms to automatically match differentiated management strategies according to the actual situation, and design intelligent activity project approval process to realize real-time linkage of funding, material requisition, and inventory data, and synchronously record the information of community activities. Second, upgrading the collaborative process, completing intelligent matching and eliminating conflicts. Deploying the resource intelligent scheduling system can optimize the allocation of budget funds, activity materials, activity venues, and other resources according to the activities of student associations. Thirdly, the incentive mechanism has been reorganized to provide quantitative assessment and positive feedback. The credit bank for student associations is designed to convert the participation and contribution of association members into cumulative “student association credits” and support the exchange of “second classroom credits”. Fourth, the supervision system should be strengthened and real-time network information monitoring should be carried out. A network information monitoring system can be established to monitor the network information released by student associations in real-time, based on their registered accounts on WeChat, Weibo, TikTok, and other new media platforms. After the completion of the optimization of the student association management mechanism can realize the tripartite governance among the Student Association Management Department, instructors, and student associations.

#### **4.3 Build Digital Intelligent Management Platforms and Cultivate Compound Talents to Participate in Student Association Management.**

Based on B/S (Browser/Server) network architecture, Web server, ECS (Elastic Compute Service) cloud server, and other hardware and software to develop the student association information management platform. Set up the relevant functional modules to serve the training management of association members, activity organization management, responsibility allocation management, skills guidance management, incentive management, cultural propaganda management, using the latest big data and cloud computing technology to provide resource computing and storage, results display services, replacing the traditional Excel or Word report-based statistical management mode. Adopt the latest big data and cloud computing technology to provide resource calculation and storage, and achievement display services, replacing the traditional statistical management mode mainly based on Excel or Word reports. [5] In addition, building the student association information management platform needs to pay attention to the following four points, first, set up online registration and check-in functions for student association activities on the student user side to simplify the process of participation in activities and improve participation. Second, to add a teamwork module to help association members carry out task allocation, progress tracking, and teamwork to improve work efficiency. Third, set up an online points system to record the participation and contribution of student association members, and use the platform data to analyze the participation of members and provide a basis for personalized incentives. Fourth, it installs functional modules such as archives of student association members, activity management, financial reimbursement, etc., and supports multi-terminal synchronous operation. Combined with the development orientation of different types of student associations and the needs of members, professional administrators can be hired or composite management talents cultivated by universities can participate in the management of student associations, and be specifically responsible for the management of student associations, including the integration of information resources, members' skills training, organization and coordination, supervision of activities, data analysis and evaluation, etc. Through diversified information authorization and sharing, it is possible to strengthen communication and coordination of work among the Student Association Management Department, student associations, and administrators and avoid as much as

possible the wastage of manpower and material resources caused by misallocation of resources and duplication of supervision.

#### **4.4 Innovate the Management Process and Work Assessment System of Student Associations.**

Under the background of digital intelligence empowerment, the Youth League Committee and the Student Association Management Department of Universities can innovate the process design of student association management in response to the actual needs of student association activities and member management, design efficient and simple workflow for different types of student associations, and ensure timely feedback and handling of issues during the whole process of declaration, execution, and completion of student association activities. In addition, digital information technology can be used to create student association management portals and official social media accounts to organize, coordinate, and promote different types of student association activities, and to build a harmonious student association management atmosphere. Subsequently, according to the data obtained from the practice of student association management to optimize the management process, and at the same time to develop a perfect assessment system for student associations, to make detailed supervision and assessment of each link in the work of the associations, and to enhance the efficiency and quality of the digital intelligence management of student associations.

## **5. CONCLUSION**

In summary, the innovation of management mode and the improvement of management quality of student associations in universities in the new era have become the top priority for the development of student associations. At this stage, universities need to build a digital intelligence student association management platform, use digital intelligence technology in the whole process of association management, collect and integrate the activity data, member information data, and organizational behavior data of student associations, and provide “integrated” management for student association work. Secondly, the student association management platform can also innovate the form of management, provide student associations with a way of “self-management”, and strengthen the coordination and management between the Student Association Management Department and student associations.

## **PROJECT NAME**

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## **REFERENCES**

- [1] Wu Ping; Wang Mengjie Exploring the transformation of talent cultivation in universities driven by digital intelligence empowerment *Theoretical Research and Practice of Innovation and Entrepreneurship*. 2024 (24): 74-78
- [2] Lin Shuangfu; Guo Yafang; Luo Yafen; Yang Huiting Research on the role of curriculum-based association activities in talent cultivation *Employment and Security*, 2023 (01): 187-189
- [3] Liang Ruiming; Xu Yi Research on the Reform of Homework Mode for College Students Based on WeChat Public Platform *Journal of Hubei Open Vocational College*, 2020 (06): 148-150
- [4] Shi Junhao; Zhao Liangjun; Chen Zhengyang; Zhou Yangbo; Zhao Jiuqi; Zheng Bin Design and Implementation of Campus Association Management Software Based on Android Platform *Modern Computer*, 2020 (31): 104-108
- [5] Wu Shangyan; Chen Guiping Design and Development of Campus Association Platform Based on JavaWeb *Computer Knowledge and Technology*, 2021 (10): 76-78+92