"Internet+ Party Building": Research on the Integrated Management System of Grassroots Party Building at the Fingertips

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Abstract

The purpose of the research is to develop an integrated information platform for grass-roots Party construction in colleges and universities, as well as improving the target, efficiency, and integration of grass-roots Party construction management. The development of grassroots parties at colleges and universities must now contend with additional difficulties such as information fragmentation, poor PC and mobile terminal integration, a lack of online and offline connectivity, and data security. In the research, we have implemented timely mechanism innovation, platform reconstruction, reconstruction of Party building data standards, operation and maintenance of information security, enrichment of carriers and team building, among other targeted actions, in the framework of "Internet+ Party building". In the end, the aforementioned measures are extremely important as research results for advancing the development of a comprehensive information platform for grassroots Party construction and the use of Party construction activity at colleges.

Keywords

Internet+ Party Building, Grass-Roots Party Construction, Platform Construction

1. Introduction

The Party Central Committee has undertaken a number of significant deployments related to the Network Power Strategy and the Big Data Strategy since the 18th Party Congress in order to drive the significant development of the digital economy with thorough digital reform. The former researches assert that "digital

technology is being fully integrated into all fields and processes of human economic, political, cultural, social, and ecological civilization construction with new concepts, new industries, and new models, bringing extensive and profound impact on human production and life", General Secretary Xi accords great importance to the profound changes and far-reaching effects that digital technology has had on society. It is required to grasp the digital reform as key traction, the digital cognition, digital thinking, digital technology into a comprehensive grassroots Party construction, "a network" concept to pry grassroots governance optimization and upgrading (Gu, 2022). The most significant year 2021, shows Zhejiang's comprehensive implementation of the "red root of the strong foundation project", closely around the construction of the Party building led by the grassroots overall wisdom and governance system to promote the full force, focusing on the protection of the overall situation powerful escort overall. So the main purposes of this article are to figure out the practice of integrated management system of grass-roots Party building in colleges and universities and how to improve the target, efficiency, and integration of grass-roots Party building management have become critical issues for grass-roots Party building in colleges and universities against the backdrop of the "Internet+" era.

The "Red Roots and Strong Foundation Project" shall be completely executed, and the Party's general leadership should be carried out throughout the whole process of school work at all levels, according to the work conference of the Zhejiang education system in 2022. We should enhance the overall reform of education while also putting into practice the strategic action of the digital education reform. The specific performance is the creation of Party-building websites and web pages, as well as the utilization of information network technology to disseminate work information. To improve Party members' education and learning management, we employ the remote education network and other network media. National Party constructing cloud platform is primarily a platform for spreading propaganda created by the propaganda or media department alone. Deep integration of the Internet into all spheres of life will be facilitated by the creation of the Internets united body with cloud computing, big data, and super APP. The problems that existed in them can be summarized as followings: Firstly, the informatization of Party building at China's colleges and universities is still at a Web 2.0 or even Web 1.0 level. Secondly, the use of the network to strengthen the interaction between cadres and the masses, Party members, and mass communication is relatively limited (Xia, 2017). The usage of Information network platforms towards post propaganda and educational materials is insufficient. Thirdly, the use of mobile network technology for Party building work is still inadequate, despite the fact that it is extensively employed in public life. Although some units have formed a "Party members WeChat group" and "cell phone newspaper", the content is quite sparse. Furthermore, the unified network of Party building covering Party organizations at all levels nationwide has not yet been formed. The "five levels of Party building websites" from central to provincial, city, district, county, street, and town are essentially finished and the

majority of links between the websites of Party organizations at the upper and lower levels have been established.

2. New Challenges of Grass-Roots Party Construction in Universities under the Background of "Internet+ Party Construction"

Under the background of "Internet+ Party Construction", the process of how obtained the challenges can be listed as below: 1) Survey method: Collecting materials about the real situation or historical situation of the Party construction. 2) Observation method: directly observe the Grass-roots Party Construction according to a certain research purpose, research outline or observation form to obtain information. As a result, four challenges can be summarized as following.

2.1. Information Fragmentation Phenomenon

There is now a trend of information fragmentation and a relatively single purpose for the Party construction management systems used by colleges and universities in the sector (Sun, 2020). The majority of Party construction networks in colleges and universities primarily concentrate on the collection of information about Party members, students, the dissemination of Party construction knowledge, and the system in use only performs the functions of recording and reading Party construction information, which is **lack of integration** with Party members' learning and education and cannot even be used to supervise an organization. The absence of interaction and communication tools, low efficiency of information transmission routes, and difficulty in penetrating up and down make it impossible to adequately satisfy the demands of Party group services. Information overload is a growing concern which needs **more concerns about the innovation in mechanisms as well as the new platform**.

2.2. Ineffective Mobile and PC Terminal Integration

As of now, the system at colleges and universities has not clearly progressed on the fundamental issues with Party formation, such as the challenges of assessment, accountability to the next, and democratic decision-making, etc. The system platform of the PC terminal has limitations due to its fragmented features and poor management efficiency, which prevents it from meeting the current and future demands for the development of digital platforms for grass-roots Party formation in colleges and universities. In the age of mobile Internet, the university Party construction management system's mobile terminal also struggles with incomplete coverage and subpar features (Cui, 2018). In colleges and universities, the majority of the mobile ends of the Party construction management system are simple web page news migrations of the PC end, which are not adapted and built for the features of the mobile end, and are not convenient for teachers and students to manage, study, and query through the mobile end,

which is far from keeping up with the demand of modern Party construction work for PC end and mobile end co-working. The key strategy towards this challenge is mainly from the angle as reconstruction of the platform, and the process needs quite large efforts on the technical development.

2.3. Inadequate Online and Offline Linkage

A strong online and physical mass channel is essential for Party-building efforts, as is close touch with Party members and the general public. Many offline learning activities are moving online or combining online and offline nowadays, particularly in the context of the normalization of disease prevention and control. The creation of parties, learning management, theme Party days, organizational life meetings, three linkages, volunteer services, etc. are covered in the relevant courses. There is an issue with the system's lack of online and offline connectivity, despite the fact that they are realized with both online and offline situations. The specific performance is that the Party building data in colleges and universities are not interconnected and operable, which causes the phenomenon of "data silos" in all Party building-related systems and businesses; the online learning activities are stuck in the form of punching cards and propaganda reports but ignore the Party building learning content construction. Innovation in mechanisms and relevant data standards may reduce the distance between online and offline from the basic function. Make the more linkage in on-offline relationship and gather information value during the process.

2.4. Data Security Issues

Party-building data is unique in that it has high data sensitivity and is vulnerable to leaks of sensitive information. Due to design and financial constraints, the majority of the university's Party construction management system is not yet in place to secure Party construction privacy data, and there is a danger of both active and passive leakage. Party-building data managers are limited by their lack of knowledge regarding the confidentiality standards and requirements of meetings, documents, and other materials in Party-building data, and are thus more prone to disregard data security concerns. Party-building information is vulnerable to prying eyes, thieves, and malicious manipulation throughout collection, transfer, and subsequent processing mission, and secondary processing are at risk of peeking, stealing, and malicious tampering. The proper strategy towards this problem is mainly about data protection, especially confidentiality and the control of permissions.

3. Fresh Attempts at Grassroots Party Building in Colleges against the Backdrop of "Internet+ Party Building"

3.1. Innovation in Mechanisms

The grassroots Party building at colleges and universities should first implement a number of mechanism changes against the backdrop of "Internet+ Party con-

struction" (Guo, 2016). The innovation measures can be introduced in detail as three aspects: One is the mechanism of Party construction that links online and offline activities together, realizing "six online" for the original offline activities: online organizational activities, online organizational work, online Party member education, online mass service, online supervision & evaluation, and online decision support. The "six online" is the basic framework for the new mechanism and put forward the blueprint about future development direction. The second is the data review mechanism, which requires that data submitted into the system include review links, make arrangements for professional employees to confirm the validity of the data review, and then, following an audit, enter the management database. The data review could set three or four-layers review staffs in the process for the Party building, including basic reviewer, prior reviewer, top reviewer and ultimate administrator. The third step is to create and enhance the data management system so that data input, filtering, deletion, and other processes are done according to the correct specifications and information hegemony is avoided. In this step, it has more demonstration on the manual operations to modify the specific regulations during the data-dealing procedures. For instance, every input data should be cleaned and figured out its original source before entering data center in case of a misunderstanding of the data source.

3.2. Reconstruction of the Platform

The primary platform is simply built on the normal management system, and has only one level space as Party Branch. In this space, it consists of several parts as Branch Information, Work Awareness, Branch Message and Work Statistics. Each part can be entered from the entrance in the space interface and has its own simple data statistics. The primary platform can be listed as the red circle part of Figure 1. Based on the primary system, we create the integrated management system of grass-roots Party construction for Zhejiang universities based on the Dingding system; this system puts the platform of "Party construction leading" and the method of "keeping traces of performance" at the fingertips of universities and enables them to implement intelligent Party construction. It is a platform for Party planning that concentrates on the Party planning industry and considers the service aspect. The reconstruction measures towards the platform can be outlined as followings: Firstly, at the architectural level, the integrated Party building management system at your fingertips supports organizational management, online learning, organizational activities, and Party building information within the framework of "one network, two libraries", and adheres to the general principle of "unified standard, integration and sharing, focusing on application and ensuring security". Secondly, we modify the integration of organizational management, online learning, organizational activities, and Party-building information to realize the integration of Party building information platform, which is based on the newly proposed framework as "one network, two libraries, four levels of space, and multiple scenes". The "one network" re-

fers to the Zhejiang universities' integrated Party building network; the "two libraries" stand for the Party building's online learning materials and management information database; and the "four levels of space" stand for the Party Committee, Party General Branch, Party Branch, and Party Members at each of their respective organizational levels. Party Committee, Party General Branch, Party Branch, and Party Members are the four levels of the "four-level space"; "multi-screen interaction" refers to the provision of unified and one-stop service for various terminals, such as PCs and mobile phones. See the following **Figure 1** and **Figure 2** for details.
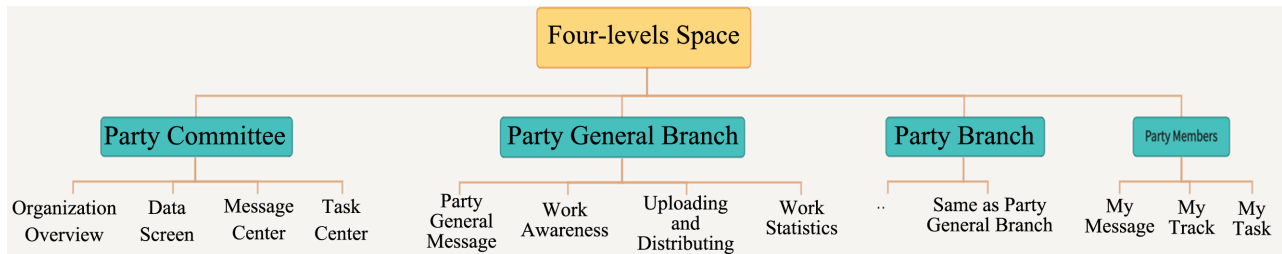

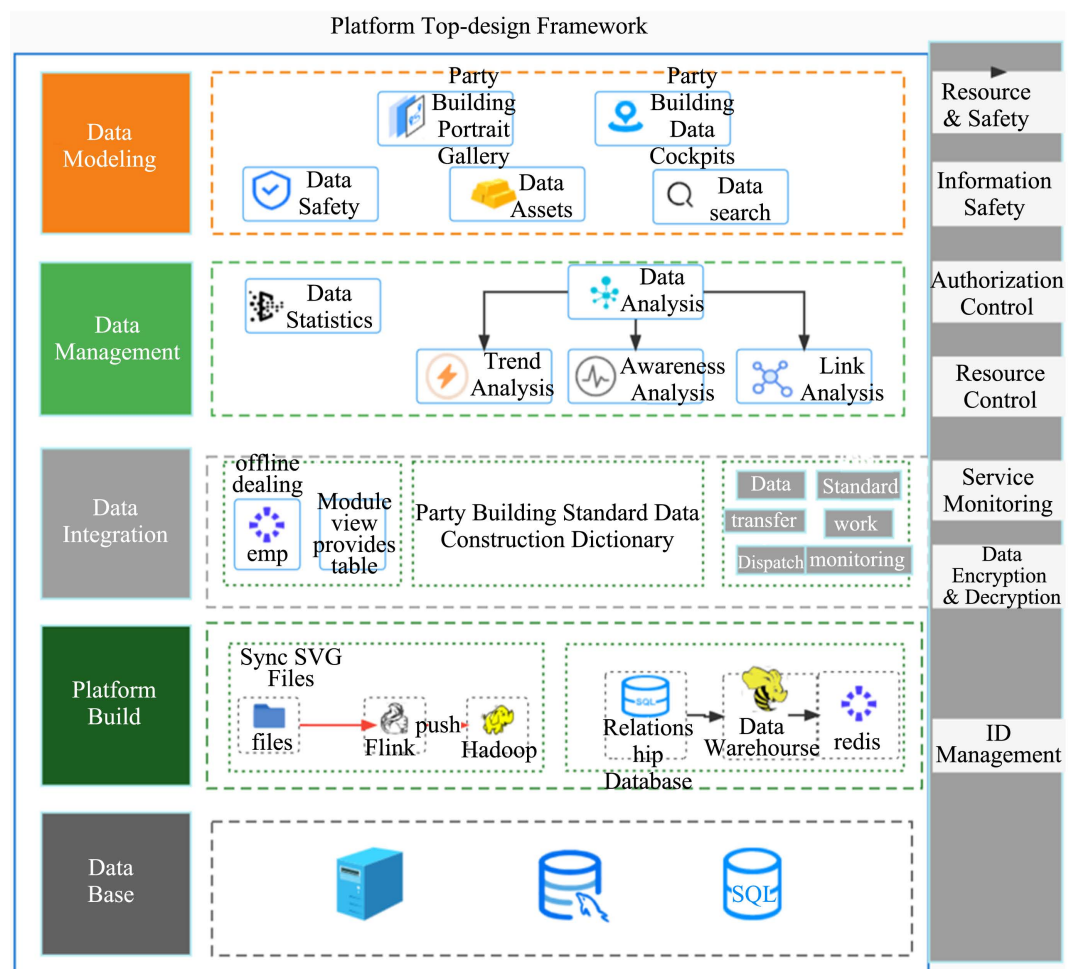**Figure 1.** Party building four-levels space.

Figure 2. Platform top-design framework.

Thirdly, the platform for data storage and computing is in charge of the foundation layer. The platform offers big data algorithm creation and model application services, distributed storage architecture, and a massively parallel computing foundation. Fourthly, to prevent data silos, assure data uniformity, and enable data openness and sharing, the data layer must provide a consistent data model system. A number of common platform service elements, including data processing and uniform user rights, are offered through the interface layer. It consists of a platform for the governance and administration of big data, a system for managing behavioral data, systems for gathering and filling out data, systems for gathering and exchanging service data, etc. What is more, with big data analysis and mining at its core, the application layer creates a platform for monitoring and analysis, such as the Party building big data analysis system and the Party member data system, as well as a number of cutting-edge and all-encompassing auxiliary decision-making systems, including situation awareness, intelligent search, and visualization analysis.

The performance of the measures has already been tested and the new platform has been tried in the Party committee of Zhejiang Open University with a total of 34 Party organization departments including the subordinate general branches and sub-branches since June 2022. In the test, the Party branches have organized a total of 811 thematic Party day activities during the use of the platform. Each Party branch organized and held a total of 1431 branch meetings and 472 general branch meetings during that time. Organizations issued a total of 2614 online learning tasks and released an amount of 1626 theoretical learning information at the same time. 436 triple-connected activities were organized and carried out by each organization during the use of the platform. In a word, the tests of those updated measures towards the platform have shown steady and obvious progress.

3.3. Reconstruction Party Building Data Standards

Party building data standards require reconstruction based on mechanism innovation and platform reconstruction, and compliance with "one number, one source" is essential to enable the uniform collection and distribution of Party building data. The data statistics function is strengthened during the standard reconstruction process in order to present various aspects of Party building data, such as learning and activities by branch, general branch, and university Party committee, as well as to calculate and generate Party members' points and Party building index, provide data support for precise warning, reminding, and supervision of Party building work, and realize the automatic portrait of Party building work of Party members. By creating uniform data collection and access standards as well as standards for external service access and retrieval, the technological implementation in question aims to unify the system and process of data access (Wang & Bai, 2022). The service collecting and data sharing system is then used to collect the school situation data for each business system and connected platforms. Utilize the behavior data management system to obtain the

behavior information for the instructors and students in each business system. Obtain the regularly filled-in aggregated data using the data collecting and filling mechanism in reconstruction data standard. Utilize the platform for data governance and management to obtain corporate data from established data sources. Finally, the data pooling library of the intelligent Party building brain stores this aggregated data consistently. The relevant managers can distinguish and understanding the usage of the updated data standards after gathering data and figures from now.

3.4. Data Protection

In order to properly preserve data security, the most cutting-edge technical tools are deployed to secure system users' personal information.

- **Confidentiality:** Security against data theft, tampering, or peeking through data encryption during data collection, transit, and processing to protect its security, Party building data must be encrypted when being kept in the system. This measure has been tested in the new-coming data for further storage, but the security level needs to be refined in the future.
- **Anti-leaking:** Stop the leakage of private information using technologies like drag-and-drop, document read/write controls, screen copy/screenshot controls, and memory theft controls. For this test tip, the system needs the help from other anti-leaking software and the protection can be in systematic planing.
- **Control of permissions:** Restrict access to data based on user privileges, operation logging, etc. This measure can be realized by the advanced setup in the management interface, for example, the normal Party members only have the entrance to the Party Members Space.
- **IP limits:** High-frequency access limitations, etc. are anti-attack measures. Depending on the circumstances, the **system** regulates the number of clicks, setting twenty as maximum number in the system or after a click; the button is changed to become unclickable.
- **Network security watch:** For the system, every day at 22:00, the network security team in the group reports on the day's events, such as if there were any reported incidents of unrest, and completes a daily overview of the network security status especially in the network security time.

3.5. Rich Carrier and Team Building

Promote the thorough integration of the Internet with all facets of life by using cloud computing, big data, and super APP as the carriers of the creation of Internet unity. For this integration measure, relevant information resource carriers such as the WeChat small program and mobile online learning app during the construction of Party construction resources in colleges and universities results in the creation of a "online Party branch contact park", which further combines the carrier construction of Party construction learning. When it comes to team building in the system, it maximizes the dynamic management of Party mem-

bers, manages them dynamically in accordance with the large Party building database after the system operations, and pays attention to the development and management of the reserve technical Party building abilities at the same time.

4. Conclusion

Under the background of "Internet+ Party building", the targeted measures such as mechanism innovation, platform reconstruction, Party building data standard reconstruction, operation and maintenance information security, rich carrier and team building are carried out and field tested at the right time. Under the background of "Internet+" era, it is worthwhile for Party construction workers to think about how to improve the practice of integrated Party construction management system in universities and improve the target, efficiency and integration of grass-roots Party construction management.

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Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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