

Building a Digital Profiling Information Platform for Primary-Level Party Organizations and Party Members in Higher Education Institutions: A Case Study of China University of Geosciences (Beijing)

Man Liu

Information Network and Data Center, China University of Geosciences (Beijing), Beijing, China
Email: liuman@cugb.edu.cn

How to cite this paper: Liu, M. (2026).

Building a Digital Profiling Information Platform for Primary-Level Party Organizations and Party Members in Higher Education Institutions: A Case Study of China University of Geosciences (Beijing). *Creative Education*, 17, 1837-1850.

<https://doi.org/10.4236/ce.2026.1710104>

Received: August 29, 2026

Accepted: October 10, 2026

Published: October 13, 2026

Copyright © 2026 by author(s) and Scientific Research Publishing Inc.

This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).

<http://creativecommons.org/licenses/by/4.0/>



Open Access

Abstract

In the new era, the digitalization strategy in education is driving primary-level Party building in higher education institutions to transition from traditional ledger-based management to precision governance through big data. Digital profiling of primary-level Party organizations and Party members, as a core application of smart Party building, can address practical challenges such as subjective evaluation, coarse governance, and fragmented data. Taking the current status of Party building informatization at China University of Geosciences (Beijing) as a sample, the university faces bottlenecks including the independent operation of multiple Party-building systems across departments, insufficient data interconnection, a complete absence of advanced AI applications, and weak decision-support capabilities. This paper reviews the current construction practices of digital profiling systems for Party organizations and Party members in domestic universities, constructs an indicator system for organizational and individual Party member profiles tailored to the institutional characteristics of CUGB, clarifies the full-domain data sources and data flow logic, and conducts an in-depth analysis of core challenges in platform construction, including data silos, indicator adaptability, security and compliance, and technical talent. It also provides practical references for the implementation of digital profiling platforms in similarly industry-featured higher education institutions, facilitating the transformation of primary-level Party building from “experience-based judgment” to “data-empowered decision-making”.

Keywords

Smart Party Building in Higher Education, Party Building Digitalization, Digital Profiling of Party Organizations, Digital Profiling of Party Members

1. Introduction

Xi Jinping, General Secretary of the Communist Party of China (CPC) Central Committee, President of the People's Republic of China, and Chairman of the Central Military Commission, pointed out that “digital-driven education is an important breakthrough for China to open up new tracks and foster new strengths in educational development.” (Xi, 2023) The *14th Five-Year Plan for Advancing National Government Informatization* explicitly includes the Informatization Project for Improving the Party's Governance Capacity. It proposes to markedly raise the digital and intelligent levels of Party working departments and further deepen the application of informatization in Party committees. The *Key Work Points of the Department of Ideological and Political Work of the Ministry of Education* (2023) clearly states that the basic data statistical analysis platform for university Party building should be fully utilized to continuously enhance the scientific level of Party building work in institutions of higher education and further strengthen digital empowerment.

As the main front for fostering virtue through education, higher education institutions rely on primary-level Party branches as the battle fortresses that connect faculty and student Party members, implement ideological and political education, and support institutional development. With the growing scale of faculty and student Party members and the increasing stratification of the Party member population—including faculty members, undergraduate students, graduate students, and retired Party members—the traditional Party management model, which relies on paper-based ledgers, manual statistics, and qualitative assessments, can no longer accurately capture the operational status of organizations or the developmental dynamics of individual Party members. This model suffers from deficiencies such as vague evaluation, delayed warning mechanisms, and a lack of targeted cultivation. The application of big data, artificial intelligence, and other digital technologies to innovate the activity formats of primary-level Party organizations and enhance Party governance efficiency constitutes an integral component of educational digitalization.

Big-data digital profiling technology offers a technical pathway to address the above challenges: by integrating and modeling multi-source Party affairs and business data, it generates quantifiable visual profiles—such as organizational health maps and Party member growth radar charts—enabling automatic identification of branch weaknesses, dynamic early warning of individual Party members' ideological and behavioral patterns, and personalized recommendation of learning resources. As an institution of higher education with distinctive charac-

teristics in geological resources, China University of Geosciences (Beijing) has already established multiple information management systems, including smart Party building, cadre management, student digital ideological and political education, and faculty ethics information management. However, these systems are constructed and maintained by different departments—the Organization Department of the Party Committee, the Publicity Department, the Student Affairs Department, and the Faculty Affairs Department, respectively—resulting in insufficient interconnection and interoperability among systems, a typical “data chimney” phenomenon. Moreover, intelligent applications for Party organization and Party member digital profiling have not yet been developed. Based on the university’s current informatization foundation, studying the overall construction logic, indicator system, data links, and practical bottlenecks of a digital profiling information platform for primary-level Party organizations and Party members holds both theoretical and practical value for improving the quality and efficiency of smart Party building in industry-featured higher education institutions.

2. Current Status of Digital Profiling System Construction for Party Organizations and Party Members in Domestic Universities

2.1. Construction Achievements: Preliminary Implementation of Profiling Platforms in Multiple Universities

In recent years, key national universities and local undergraduate institutions have successively embarked on explorations of digital Party building profiling, accumulating distinctive practical experiences.

In terms of the overall architecture of smart Party building information platforms, Beijing University of Civil Engineering and Architecture has constructed an application system supported by basic Party affairs management, Party member education services, organizational life applications, Party building measurement and early warning, and data-driven decision analysis, achieving streamlined management services, visualized organizational life, real-time work supervision, diversified Party member education, flattened communication and interaction, and intelligent evaluation and decision-making (Qi, 2019). The platform establishes evaluation indices such as the “Strengthening Foundation Index”, “Fortress Index”, and “Pioneer Index”, quantifying all assessment elements and publishing them as university-wide “Party Building Indices”, which provide precise evidence for profiling Party organizations and individual Party members (Qi, 2019).

In terms of evaluation systems for the role performance of university Party members, research at Zhongnan University of Economics and Law, grounded in the logic of digital intelligence empowerment, constructs a precise evaluation system encompassing six dimensions: political leadership, service effectiveness, academic innovation, organizational construction, effectiveness in digital-intelligence application, and integrity and self-discipline. Empirical validation demonstrates that this system effectively addresses traditional bottlenecks in Party man-

agement, enabling precise profiling, dynamic control, and targeted empowerment of Party members' role performance (Wang & Bi, 2026).

In terms of data profiling technology driving Party member evaluation, research at Shenyang Aerospace University establishes a four-in-one evaluation pathway comprising “data collection, tagging, profile modeling, and application feedback”. By integrating multi-source data from Party affairs, student affairs, academic administration, and research administration, the study defines a multidimensional, quantifiable indicator system and generates both individual and group-level visual digital profiles, facilitating the transition of Party member evaluation from “vague impressions” to “precise profiling” and from “static assessment” to “dynamic management” (Gao, Chen, & Zhou, 2026). The study also employs radar charts and other visualization tools to intuitively display individual score distributions across dimensions such as political literacy, academic research, practical service, discipline and conduct, and development potential (Gao, Chen, & Zhou, 2026).

In terms of AI-empowered digital Party building practices, research at Jilin Business and Technology College systematically analyzes current dilemmas from three dimensions—Party member education, organizational management, and service effectiveness—and proposes practical strategies such as building an intelligent learning ecosystem, developing an integrated management platform, and refining precision service mechanisms. The study emphasizes that AI drives the transformation of Party member education from a one-size-fits-all approach to personalized precision targeting, achieving accurate content matching through intelligent profiling and personalized recommendation technologies (Zhang, 2026).

At the theoretical level of digital technology empowering Party building, research at the University of Electronic Science and Technology of China suggests that the “precision profiling” function contributes to improving the quality of Party member cadres in higher education institutions. By leveraging intelligent cognitive and sensing technologies, Party organizations can acquire more behavioral data from online activities of Party members and cadres, conduct big-data analysis to create profiles, grasp the ideological dynamics of faculty and students, and provide robust support for Party member recruitment, cadre selection, and routine education and management (Mi, 2022).

From the perspective of application scenarios, existing profiling platforms generally realize three foundational functions: first, visualized comprehensive assessment, using heat maps and radar charts to display branch organizational capability scores and hierarchical distributions of overall Party member competence (Gao, Chen, & Zhou, 2026); second, precision-targeted categorized education, automatically pushing customized Party course resources based on individual learning deficiencies, achieving a shift from “flood irrigation” to “precision drip irrigation” (Zhang, 2026); and third, proactive risk early warning, automatically triggering alert mechanisms for branches and Party members who have long been absent from organizational life, failed to meet assessment standards, or received

low evaluation scores from constituents (Cheng, 2026).

2.2. Common Shortcomings—Highly Aligned with the Current Situation at CUGB

2.2.1. Prominent Data Fragmentation and Difficulties in Data Sharing and Collaboration

The practice at Beijing University of Civil Engineering and Architecture demonstrates that “smart Party building” requires breaking down barriers between teaching, research, personnel, and student affairs information systems, eliminating information “islands”, and building a unified, shared big-data center to achieve data interoperability (Qi, 2019). Mi Huaquan (Mi, 2022) further points out that the compartmentalized management structure and diverse data sources have given rise to problems such as information fragmentation, compartmentalized applications, and disconnected services, with different Party organizations and management departments unable to share or interface data—this has become a significant constraint on the effectiveness of digital technology in empowering university Party building. These descriptions are highly consistent with the current reality at CUGB, where the cadre system and personnel system are not synchronized, and data between the smart Party building platform and the Party Member E-Pioneer platform are not interconnected.

2.2.2. Profiling Indicators Overemphasize Static Outcomes, with Insufficient Dynamic Tracking and Data Integration

The evaluation systems for university Party members still exhibit notable structural deficiencies in practice: indicator design overemphasizes static outcomes—such as meeting attendance and course grades—while inadequately tracking the growth process, innovative capacity, and practical contributions of Party members; evaluation processes rely heavily on year-end centralized assessments, resulting in data lag and delayed feedback (Wang & Bi, 2026). Gao Delun (Gao, Chen, & Zhou, 2026) also note that traditional evaluation methods commonly suffer from single-dimensional evaluation, static processes, and insufficient data support, with prominent “data silo” issues, inconsistent data standards across platforms, and existing platforms largely focused on data recording and simple display rather than fully utilizing big data and AI technologies for deep data mining.

2.2.3. Insufficient Supply of Advanced Intelligent Applications, with Emphasis on Display Rather Than Decision Support

Cheng Rong (Cheng, 2026) finds that most universities’ digital Party building explorations have limitations: limited functionality—existing platforms primarily focus on data recording and simple display, lacking multidimensional display functions for Party member performance; and weak analytical capacity—failing to fully apply big data and AI technologies to mined data, making it difficult to extract valuable evaluation conclusions. Zhang Mingyu (Zhang, 2026) further points out that although some universities have introduced AI learning platforms, they have not fully leveraged core functions such as intelligent profiling and per-

sonalized recommendation; recommendation algorithms are often based on superficial data such as learning duration, failing to conduct in-depth analysis of knowledge gaps and learning outcomes, resulting in a coexistence of “repetitive recommendations” and “missed needs”. This echoes the current situation at CUG (Beijing), where advanced AI applications in Party building are entirely absent—the platform’s value is limited to ledger digitization and has not yet played a core role in data-driven governance to support Party committee decision-making.

3. Construction of a Digital Profiling Indicator System for Primary-Level Party Organizations and Party Members in Higher Education Institutions—A Case Study of China University of Geosciences (Beijing)

Following the four principles of prioritizing political orientation, data collectability, stratified classification, and dynamic adjustability, this study establishes two separate indicator systems—one for Party branch digital profiling and one for individual Party member digital profiling—each comprising both mandatory basic indicators and optional extended indicators. The data supporting these indicators are automatically retrieved from the university’s existing data platform, smart Party building system, cadre management system, integrated student digital ideological and political education platform, faculty integrated information system, and faculty ethics information system, minimizing manual data entry. For data not currently available in the existing data platform or information systems, two supplementary approaches are adopted: first, expanding the functional modules of existing Party-building information systems to enable business-process-embedded data collection; and second, leveraging public information platforms such as the online service hall and low-code business platforms to implement online functionality and data acquisition.

3.1. Indicator System for Party Branch Digital Profiling

A five-dimension framework—political leadership, organizational compliance, team development, role performance, and innovation vitality—is constructed for primary-level Party branch digital profiling, accommodating the differentiated evaluation needs of faculty branches and student branches. Indicator weights may be adjusted in response to evolving Party-building priorities.

1) Political Leadership Dimension (Weight: 25%)

This dimension focuses on the performance of the Party branch’s political functions. Basic indicators include: the implementation of the “first agenda” mechanism (compliance rate of the first-agenda system and participation rate in theoretical study sessions), and the quality of implementing the ideological responsibility system. Extended indicators may incorporate specific observation points for Party building’s role in guiding disciplinary development and institutional advancement, aligned with the “Five Learnings” mechanism—disciplinary “fusion”, academic “uplift”, academic climate “sedimentation”, scholars “crystallization”,

and students “mineralization”.

2) Organizational Compliance Dimension (Weight: 25%)

This dimension focuses on the standardization of the Party branch’s organizational life. Basic indicators include: the quality of implementing the “Three Meetings and One Lecture” system, the frequency and quality of themed Party day activities, the implementation of organizational life meetings and democratic appraisal of Party members, the coverage rate of the heart-to-heart talk system, and the standardization of the request-and-report system.

3) Team Development Dimension (Weight: 20%)

This dimension focuses on the quality of Party member development and education management. Basic indicators include: the compliance rate of the Party member development process, the quality of training and evaluation of Party applicant activists, the completion rate of Party member education and training, the coverage rate of mobile Party member contact and management, and the timeliness of Party fee collection and remittance.

4) Role Performance Dimension (Weight: 18%)

This dimension focuses on the tangible effectiveness of the Party branch as a battle fortress. Basic indicators include: the average participation rate of Party members in branch activities, the public recognition of Party members’ vanguard and exemplary role, the branch’s contribution to advancing core institutional work, and the practical effectiveness of engaging and serving faculty and student constituents. Outcome-oriented indicators such as constituent satisfaction survey scores and the number of honorary awards received may also be incorporated.

5) Innovation Vitality Dimension (Weight: 12%)

This dimension focuses on the distinctiveness and innovativeness of branch work. Basic indicators include: innovative outcomes of branch working methodologies, the effectiveness of Party building brand development, awards and commendations received for Party building work, and the number of exemplary cases demonstrating deep integration of Party building with core business operations.

3.2. Indicator System for Individual Party Member Digital Profiling

A five-dimensional framework—ideological performance, organizational behavior, professional/academic performance, service practice, and conduct and discipline—is adopted to enable dual quantitative evaluation of both Party spirit performance and professional development. Differentiated weight configurations are applied to faculty Party members and student Party members, with indicator weights adjustable in response to evolving Party-building priorities.

3.2.1. Indicator Framework for Faculty Party Members

1) Ideological Competence Dimension (Weight: 25%)

This dimension focuses on faculty Party members’ political theory study and ideological development. Key indicators include: frequency and duration of theoretical study, quality of contributions in thematic seminars (with AI-assisted tex-

tual analysis), standardization and content quality of submitted ideological reports (with AI-assisted textual analysis), and completion rate of intra-Party intensive education programs.

2) Organizational Behavior Dimension (Weight: 20%)

This dimension focuses on faculty Party members' participation in organizational life and performance of assigned duties. Key indicators include: attendance rate and quality of participation in organizational life, performance of duties in branch work, timeliness of Party fee payment, and completion rate of tasks assigned by the Party organization.

3) Professional Performance Dimension (Weight: 30%)

This dimension focuses on faculty Party members' vanguard and exemplary role in their professional posts. Key indicators include: teaching and research performance, effectiveness in integrating ideological and political education into curricula, and tangible outcomes in student development and mentoring.

4) Service Practice Dimension (Weight: 15%)

This dimension focuses on faculty Party members' practical performance in engaging with and serving constituents. Key indicators include: duration and quality of volunteer service participation, specific cases of supporting faculty and students in difficulty, and contributions to public welfare activities.

5) Conduct and Discipline Dimension (Weight: 10%)

This dimension focuses on faculty Party members' daily behavioral norms and compliance with discipline. Key indicators include: records of intra-Party disciplinary actions (negative list), faculty ethics assessment results, and constituent satisfaction evaluations.

3.2.2. Indicator Framework for Student Party Members

1) Ideological Competence Dimension (Weight: 25%)

This dimension focuses on student Party members' political theory study and ideological growth. Key indicators include: completion rate of Party course requirements, participation in red-study educational activities, performance in theoretical knowledge competitions, and quality of submitted ideological reports.

2) Organizational Behavior Dimension (Weight: 20%)

This dimension focuses on student Party members' participation in organizational life and organizational awareness. Key indicators include: completeness and standardization of Party admission materials, completeness of mentoring conversation records with cultivation supervisors, attendance rate and quality of participation in themed Party day activities, timeliness of Party fee payment, and completion rate of tasks assigned by the Party organization.

3) Academic and Research Dimension (Weight: 25%)

This dimension focuses on student Party members' academic performance and innovative capacity. Key indicators include: academic ranking, participation in science and innovation projects, awards in disciplinary competitions, and field-work outcomes for graduate students.

4) Service Practice Dimension (Weight: 18%)

This dimension focuses on student Party members' practical performance in engaging with and serving constituents. Key indicators include: duration and quality of volunteer service, contributions to class and student organization service, and support provided to fellow students in difficulty.

5) Conduct and Discipline Dimension (Weight: 12%)

This dimension focuses on student Party members' daily behavioral norms and compliance with discipline. Key indicators include: dormitory civility scores, general disciplinary performance, and completion status of early warnings and corrective actions.

3.3. Application Scenarios and Differentiated Scoring Mechanisms

Application Scenarios: The university-level Party committee view provides an overall profile overview of all branches and intelligent identification of weak areas in Party building; the secondary-level Party organization view enables horizontal comparison of branches under the jurisdiction and batch identification of Party members with specific deficiencies; the branch secretary view presents detailed profiles of each Party member in the branch with personalized development recommendations; and the individual Party member view displays self-growth profiles with prompts identifying theoretical learning gaps.

Differentiated weight configurations are implemented for different types of Party members: For faculty Party members, the weight of the “professional performance” dimension is moderately increased (30%) to highlight Party building's role in guiding professional development; for student Party members, the weights of “academic and research” (25%) and “service practice” (18%) are moderately increased to reflect the educational orientation toward holistic development. The university-level Party committee may dynamically adjust dimension weights in line with annual Party-building priorities—for instance, increasing the weight of the ideological competence dimension during thematic education campaign years—to ensure flexible adaptability of the indicator system.

3.4. Validation and Perfection of the Indicator System

Experts in the field of university Party building from inside and outside the university shall be invited to hold an evaluation meeting concerning the indicator system and weights for Party branch and member profiling. The first-round revision of the indicator system will be carried out based on evaluation results. After the completion of the digital profiling information platform, pilot application will be launched in a small number of Party branches, and the second-round adjustment and improvement of the indicator system will be implemented according to trial operation outcomes. Subsequently, the University Party Committee may conduct iterative adjustments to the indicator system in light of large-scale practical application of the platform.

4. Data Sources and Data Flow Logic for the Digital Profiling Information Platform for Party Organizations and Party Members

Based on the existing information-based assets of China University of Geosciences (Beijing), this paper constructs a four-level data-flow logic consisting of the multi-source data acquisition layer, data middle-platform governance layer, portrait modeling and analysis layer, and visualization application output layer. It aims to connect all internal Party-building and business-operation systems of the university so as to realize one-time data collection and full-domain data reuse.

4.1. Classification of Comprehensive Multi-Source Data

1) Dedicated Party-Building System Data within the University

Organization Department of the Party Committee: Smart Party Building System, Cadre Management System, and Annual Cadre Assessment System.

Publicity Department of the Party Committee: Full-media matrix (WeChat, Douyin, Bilibili etc.) and the university's website cluster.

Student Affairs Department of the Party Committee: Integrated Digital Ideological and Political Education Platform, which primarily comprises the Student Affairs System, Student In-Depth Counseling System, Second Classroom System, Student Big-Data Early Warning System, and Student Integrated Data Dashboard.

Inspection Office of the Party Committee: Inspection Work Management System.

Faculty Affairs Department of the Party Committee: Faculty Ethics Information System.

2) Synchronized Data from Superior-Level Vertical Party-Building Platforms

Relevant data from superior-level Party affairs platforms—such as the Party Member E-Pioneer Platform and the Central Cadre Training Network—are synchronized to the university's internal data platform via standardized application programming interfaces (APIs).

3) Data from University Administrative Business Systems

Data are drawn from the Human Resource Management System, Research Management System, Undergraduate Academic Affairs and Teaching System, Graduate Comprehensive Management Platform, and Financial Party Fee Collection and Payment System. These data supplement the foundational teaching, research, and personnel information for faculty Party members, as well as the academic and science-innovation data for student Party members.

4) Supplementarily Collected Data via University Public Information Platforms

Other required data are supplementarily collected through the Online Service Hall and the Questionnaire Platform. Artificial intelligence tools are fully utilized to parse natural-language texts, which are then structured and stored in the repository.

4.2. Complete Data Flow Logic Chain

- Collection Phase: Multi-Interface Automated Retrieval to Minimize Manual

Input. API data interfaces are used to integrate data from all Party-building-related systems across the institution, with scheduled synchronization mechanisms established to automatically retrieve incremental data on a daily basis. Offline paper-based materials are processed through AI-assisted text structuring before repository entry, eliminating the need for Party affairs workers to repeatedly enter data across multiple systems and addressing the pain points of multi-platform and duplicate data entry.

- **Governance Phase: Data Cleansing, Standardization, and Desensitized Storage in the Data Platform.** A Party-building thematic data pool is established within the institutional data platform, with unified metadata field standards for all Party affairs data. The consolidated Party affairs data undergo cleansing to eliminate duplicate, missing, and anomalous entries. Sensitive information—including Party member ID numbers, contact details, and negative records on faculty ethics—undergoes hash-based desensitization and tiered storage, with three-level data access permissions (university-level Party committee, school-level Party committee, and branch secretary) to reinforce data security.
- **Modeling Phase: Indicator Matching, Tag Generation, and Profile Computation.** Standardized Party-building thematic data from the data platform flows into the profiling engine, where data fields are automatically matched against the indicator system described above. Tags are generated for individual Party members (e.g., theory-deficient type, research pioneer type, practice-service type) and for branches (e.g., standard-compliant branch, distinctive and vibrant branch, weak-and-alert branch). Weighted algorithms automatically compute branch organizational capability scores and individual Party member composite scores, generating radar charts, heat maps, and growth trajectory visualizations.
- **Application Output Phase: Tiered Visualized Presentation and Intelligent Scenario Implementation.**
 - 1) **University-Level Party Committee View:** Overall branch profile overview, stratified statistical analysis of Party member populations, intelligent identification of weak areas in Party building—supporting cadre assessment and annual Party-building strategic planning.
 - 2) **Secondary-Level Party Organization View:** Horizontal comparison of branches under its jurisdiction and batch identification of Party members with specific deficiencies.
 - 3) **Branch Secretary View:** Detailed profiles of each Party member in the branch, personalized development recommendations, and intelligent push of learning resources.
 - 4) **Individual Party Member View:** Self-growth profile, prompts identifying theoretical learning gaps, and recommended Party course resources tailored to individual needs.

4.3. Data Security Assurance

Party member profiling aggregates multi-dimensional private information cover-

ing identity, ideology, teachers' ethics, discipline, academic performance and scientific research. Such data falls under sensitive Party affairs data. Priority should be given to risk control against data leakage in cross-system data transmission and the management of unauthorized access. Strict approval for cross-system data interface invocation and hierarchical authorization for Party member profiling shall be implemented. In addition, supporting data security measures including data desensitization, access logging and operation traceability should be deployed.

5. Major Challenges in the Construction of the Digital Profiling Information Platform

Based on the current Party-building informatization status at China University of Geosciences (Beijing) and the general experience of domestic universities in developing digital Party-building profiling systems, platform implementation will face the following three challenges.

5.1. Inter-Departmental System Barriers and Significant Resistance to Data Sharing and Collaboration

At China University of Geosciences (Beijing), Party-building-related systems are independently operated and maintained by multiple departments—including the Organization Department, the Student Affairs Department, the Inspection Office, and the Faculty Affairs Department. These systems differ in development timelines, technical architectures, and database types, with no unified top-level data planning, resulting in inherent “data chimneys”. Moreover, these Party-building systems have not yet been integrated into the institutional data platform. On one hand, departments exhibit a data-silo mentality, concerned that sharing sensitive Party-affairs data may introduce management risks—resulting in an “unwilling to share and afraid to share” attitude. On the other hand, the existing systems are developed by different vendors, with some legacy systems lacking standardized API interfaces—making retrofitting costly and time-consuming. Furthermore, the discipline inspection and united front departments currently lack dedicated information systems, meaning that relevant supervisory data and non-Party personnel evaluation data lack stable collection channels—resulting in missing data for profiling indicators.

5.2. High Cost of Implementing AI-Powered Intelligent Applications and Insufficient Grassroots Digital Talent Reserves

At China University of Geosciences (Beijing), advanced AI applications for Party building are virtually nonexistent, and the development of such functionalities requires a solid technical foundation and talent pool. The university's self-built AI computing infrastructure remains relatively weak, while the shortage of grassroots talent is equally prominent. The digital literacy of Party affairs workers and Party member faculty/students varies considerably, requiring improvement through publicity and education, case studies, technical assistance, and digital training

tools including mobile internet technologies, virtual reality and augmented reality, and human-computer interaction. Since most on-campus Party affairs workers are administrative faculty members with limited professional backgrounds in big data and informatization, there is a significant risk that the platform—once built—will suffer from “emphasis on launch, neglect of maintenance”, gradually devolving into a static display tool.

5.3. Tension between Grassroots Party Affairs Workers’ Digital Acceptance and the Burden of Platform Usage

Branch secretaries and part-time Party affairs coordinators already carry heavy teaching, research, and student management workloads. If the platform imposes a large volume of new manual data entry tasks, resistance is highly likely. Mi Huaquan (Mi, 2022) points out that in the process of digital technology empowering university Party building, a “technological formalism” problem may emerge—“some university Party organizations, in order to boost the usage rate of Party-building informatization platforms, forcibly require offline work to be moved online, which in turn increases the burden on frontline Party affairs workers”; and “some university Party organizations simplistically rely on digital platforms for Party member education and management, reducing Party member education and management to quantifiable indicators, causing work to become performative”. These phenomena should serve as cautionary lessons for China University of Geosciences (Beijing). If the digital profiling platform cannot achieve automatic retrieval of more than 80% of required data and instead requires supplementary offline data entry, it will intensify grassroots workloads. In addition, some middle-aged and senior Party affairs workers have relatively weak digital operation skills—the platform’s visualized interface and operational workflows must be designed to be simple, lightweight, and accessible, lowering the barrier to usage.

6. Conclusion

Constructing a digital profiling information platform for primary-level Party organizations and Party members tailored to the institutional characteristics of China University of Geosciences (Beijing) represents a core lever for addressing the current pain points in the university’s Party-building informatization—namely, data silos, the absence of intelligent applications, and weak decision-support capacity. Grounded in comprehensive data governance, the platform establishes a scientifically rigorous yet dynamically adjustable profiling indicator system, integrates intra-institutional Party affairs and business systems to form a closed-loop data chain, enables precise assessment of primary-level branch organizational capability and quantitative evaluation of the full-cycle growth of faculty and student Party members, and drives the transformation of Party building from qualitative evaluation to data-enabled intelligent governance.

To address the challenges of data barriers, indicator adaptability, technical talent, and grassroots burden reduction, the university-level Party committee must

strengthen top-level coordination by establishing an inter-departmental digital Party-building task force, standardizing data protocols, and integrating system interfaces. AI-powered profiling applications should be rolled out in phased, light-weight increments, while a tiered data security and access control mechanism is concurrently refined. Maximizing automated data collection and minimizing manual data entry will enable the platform to genuinely empower high-quality primary-level Party building through digital profiling, providing a replicable practical pathway for the smart Party-building digital transformation of similarly industry-featured higher education institutions.

Acknowledgements

I am grateful to the Organization Department of the Party Committee of China University of Geosciences (Beijing) for providing the research grant that funded this study, and to the Information Network and Data Center of China University of Geosciences (Beijing) for offering a favorable working environment.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

References

- Cheng, R. (2026). Research on the Path of AI-Empowered Precision Management of University Party Building. *Yan'an Daily*. (In Chinese)
https://paper.yanews.cn/yarb/20260214/html/content_20260214003003.htm
- Gao, D. L., Chen, B. P., & Zhou, Y. L. (2026). Research on the Construction of Evaluation Pathways for University Student Party Members Empowered by Digital Profiling. *Hongyan Chunqiu*, 4, 117-120. (In Chinese)
<https://doi.org/10.3969/j.issn.1007-4686.2026.04.024>
- Mi, H. Q. (2022). Digital Technology Empowers the Improvement of Party Construction in Universities: Value Function and Practical Approach. *Studies on Marxist Theory*, 8, 98-106. (In Chinese)
- Qi, Y. (2019). A Practical Study on the Construction of "Smart Party Building" Information Platforms in Higher Education. *Beijing Education: Higher Education*, 7, 112-115. (In Chinese) <https://doi.org/10.3969/j.issn.1000-7997.2019.07.039>
- Wang, G. B., & Bi, L. F. (2026). Evaluating and Optimizing Mechanisms for University Party Members' Role Fulfillment. *Journal of Hubei Adult Education Institute*, 32, 111-117. (In Chinese) <https://doi.org/10.3969/j.issn.1673-3878.2026.01.019>
- Xi, J. P. (2023). Solidly Advancing the Construction of a Strong Education Nation. *Qiushi*, 18, 4-15. (In Chinese)
https://www.qstheory.cn/dukan/qs/2023-09/15/c_1129862386.htm
- Zhang, M. Y. (2026). An Analysis of Digital Innovation Practice Strategies for AI-Empowered University Party Building. *Digital Communication World*, 2, 88-90. (In Chinese)
<https://doi.org/10.3969/J.ISSN.1672-7274.2026.02.030>