

The Purpose Model for Improving Digital Management in Universities in Guangxi

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Abstract

The objectives of this research were: 1) to study the current situation of digital management in universities in Guangxi, 2) to develop the purpose model for improving digital management in universities in Guangxi, 3) to evaluate the suitability and feasibility of the purpose model for improving digital management in universities in Guangxi. The sample group of this research was 148 administrators in 20 public undergraduate universities in Guangxi. They were selected by systematic random sampling and sample random sampling. The interview group was led by administrators from 12 universities, totaling 12 people. The experts for evaluating the suitability and feasibility of the purpose model for improving digital management consisted of high-level administrators from 7 universities, totaling 7 people. The research instruments were document analysis, questionnaire, structured interview, and evaluation form. The statistics to analyze the data were percentage, average value, and standard deviation.

The results found that the current situation of digital management in universities in Guangxi in five aspects was at a high level. Considering the results of this research aspects ranged from the highest to lowest level were as follows: the highest level was the digital campus security management system, followed by the digital student management system, and the digital scientific research management system was the lowest level. The purpose model for improving digital management in universities in Guangxi has five aspects, which contain 40 measures. There are 7 measures to enhance the digital management ability of Guangxi University managers, 10 measures to promote the digital teaching management system in Universities in Guangxi, 8 measures to promote the digital scientific research management system in Universities in Guangxi, 9 measures to promote the digital student management system in Universities in Guangxi, 6 measures to promote the digital campus security management system in Universities in Guangxi. The results of the evaluation of the suitability and feasibility of the purpose model for improving digital management in universities in Guangxi were at the highest level.

Keywords: the purpose model for the development, digital management, universities in Guangxi

1. Introduction

The process of converting information into digital or computer-readable formats. However, with the advent of the information age, information transmission methods have become more and more rapid, with larger space, becoming a prominent feature and epitome of the digital age. The current development of digital technology has reached an incredible level. Digital technology has had many impacts on people's lives and learning, profoundly affecting the development and transformation of society. The education industry in universities is also deeply influenced by digital reform. Utilizing digital technology for reform and innovation has become the main path to optimize university management and promote the development of modern education. Guangxi is a relatively underdeveloped region in the development of higher education in China. Currently, the digital management system of most universities in Guangxi is not yet perfect. Many universities still adhere to the traditional top-down personnel management model, with multiple levels, slow information transmission speed, poor decision-making implementation effect, and relatively low management efficiency. Because of this, to change the backward management of universities in

Guangxi, making full use of digital technology to enhance governance capabilities and efficiency provides a good opportunity. To achieve new progress and development, universities in Guangxi must accelerate the pace of modernization, comply with the trend of digital reform, actively use digital new energy to stimulate new vitality in education development, deeply integrate various digital technologies with the education industry, and achieve modern transformation of the education industry.

One is to strengthen the digital transformation of Guangxi's university management, which is an effective path for Guangxi's universities to achieve multi-party collaborative development. In the field of higher education, digital technology can play different roles and impacts in different organizations and work. To promote the development of education, the government, society, schools, and families must work together to establish a collaborative education mechanism, which can build a good talent training environment and improve the quality of higher education. The digital reform of education can utilize various modern digital technologies, build multi-party collaborative platforms, build good collaborative education relationships, leverage the leadership role of the government, reflect the collaborative relationship between society and families, provide the necessary support for the strategic development of Guangxi universities, and promote the effective implementation of the education strategy of Guangxi universities. Additionally, digital transformation is an effective way to promote the strategic development process of universities in Guangxi. The digital transformation of education has a jumping impact on the overall development of universities in Guangxi. The digital transformation of education can use specific technologies to change the educational work of schools, reflect their educational characteristics, and establish a clear talent training framework based on the school's structure. Universities in Guangxi can make thorough plans and adjustments based on the unique cultural background and unique functions of the school, establish a strategic development framework that adapts to the school itself, and promote the orderly development of the school's strategic work. Furthermore, digital transformation is an effective tool for promoting Guangxi's universities to adapt to the development of modern society. The talent cultivation work in universities should be in line with the needs of social development talents. In the context of modernization construction, digital technology and systems should be used to establish an evaluation and testing system based on the characteristics of the school and the current situation of social development. The problems in the school's current work should be reflected and summarized, and a relevant model adapts to social development should be formulated to help Guangxi universities actively adapt to society in talent cultivation and school construction, to leverage the influence of society in talent cultivation and enhance the leadership role of Guangxi universities in social construction.

Thus, digital transformation is an effective way to improve the learning experience of Guangxi University students. In the process of digital transformation of universities in Guangxi, it is necessary to fully consider the internal and external factors of education work and improve the experience and sense of achievement of education stakeholders. As an important component of higher education, students are the key to meeting the needs of stakeholders in the education industry. By utilizing digital technology well, we can achieve deep transformation and optimization in educational management work, integrate multiple cross-time and space learning environments and resources, enhance students' interest in learning, change existing educational forms and teaching ideas, and open up new paths and methods for Guangxi universities to achieve modern high-quality education, truly improving students' learning experience.

Therefore, the title of this study is "The Purpose Model for Improving Digital Management in Universities in Guangxi" which has strong practical significance and theoretical reference value. By studying the current situation of digital in universities in Guangxi, this paper explores the influencing factors of the model for improving digital management in universities in Guangxi, and puts forward the development model, to make contributions to the management of universities in Guangxi.

2. Literature Review

Concept and Theory of Digital Management in Universities

Digital management in universities refers to the transformation of traditional management systems, the construction of a new people-oriented and efficient service system, and the process of efficiently and accurately managing various affairs of universities through the use of information technology (Zhou, 2022).

Digital reform of universities is not only a new trend in the informatization development of higher education in China, but also a powerful measure to achieve the leapfrog development of higher education management in China. Therefore, the digitization of higher education management has significant theoretical and practical significance. The

continuous promotion of digital reform will also give new development impetus to universities. However, there are still problems with the current digitization of education management in universities, such as a single approach, outdated management digitization, and serious "data silos". The digital reform of higher education management should follow the principles of sharing, openness, and consistency. Therefore, universities can take the following measures: strengthening top-level design; Deepening data fusion; Breaking through "data silos"; Build a high-quality team (Lin, 2020).

University informatization refers to the use of modern information technology by universities to build digital campuses based on their own development needs, improve scientific research, management, and services, and thus move university education into a new stage (Song, 2022).

In the information age, schools that cultivate and cultivate talents have undergone tremendous changes, such as the digitalization of school operation models, the flat structure of school organizations, the diversification of learning subjects, and the autonomy of learning methods. To adapt to the changes in schools, school management has also taken on a new starting point, namely management informatization (Wei, 2022).

In recent years, with the continuous increase in data collection in universities and the increasing reliance on quantitative analysis results in educational decision-making, the application of data mining in university management in the United States has shown a significant upward trend (Wang, 2021).

The digital era provides a good opportunity for universities to fully utilize digital technology to enhance their governance capabilities and efficiency. This study combines the era background of the "Double First Class" construction to explore the expected role of digital transformation in university governance, analyzes the practical difficulties of digital reform in university governance, and then provides feasible paths for digital improvement of university governance efficiency from multiple levels such as top-level design, smart campus, management services, scientific decision-making, and digital supervision, Intended to provide theoretical guidance and practical reference for improving governance efficiency through digitalization in universities (Xu, 2022).

A smart campus refers to a campus development mechanism that relies on technologies such as big data, cloud computing, and artificial intelligence to provide universities with information, data-driven, and intelligent teaching, research, and management services, promote the organic coordination of network technology and education, enhance the learning effectiveness of university students, and construct intelligent teaching and management. In this context, the digitization of university archives management has been widely developed. Universities should take the initiative to reflect on the problems of digitalization in archive management and explore scientific paths for digitalization in archive management (Yang, 2017).

Accelerate digital transformation to enhance the governance and development capabilities of universities, and solidly promote the construction of "Double First Class". In the era of vigorously developing the digital industry and promoting digital transformation, it is very important to break through the traditional path dependence and combine the implementation of construction goals and tasks to incorporate digital transformation into the "toolbox" of university governance (Wikipedia, n.d.)

From this, it can be seen that universities, as an important driving force of digital technology, should take the lead in realizing the revolutionary impact of digitization on higher education, promoting the comprehensive digital integration and optimization of digital academic management, digital scientific research management, teaching resource management, logistics, and service digital management systems, promoting resource sharing, fully implementing digital education, cultivating students' innovative spirit, and promoting higher education ideas, educational methods Comprehensive changes in teaching methods and modes.

3. Method

3.1 Research Questions

- (1) What is the current situation of digital management in universities in Guangxi?
- (2) What is the purpose model for improving digital management in universities in Guangxi?
- (3) How is the purpose model for improving digital management in universities in Guangxi suitability and feasibility?

3.2 Research Objective

- (1) To study the current situation of digital management in universities in Guangxi

- (2) To develop the purpose model for improving digital management in universities in Guangxi.
- (3) To evaluate the suitability and feasibility of the purpose model for improving digital management in universities in Guangxi.

3.3 Scope of the Research

(1) Population: The population of this research was school managers engaged in digital management in 20 public universities in Guangxi. According to the statistical results of the Guangxi Department of Education in March 2023, the total number of school managers in these universities is 240.

(2) Sample Group: According to Krejcie and Morgan's (1970) sampling table, the sample group of this research was 148 school managers from 20 public universities in Guangxi. Determine the specific number of people to be sampled for each university using the quota sampling method.

(3) The interviewees used in this study were 12 heads of digital management departments or information construction departments in Guangxi's undergraduate public universities. The qualifications of the interviewees are as follows: 1) Director or Deputy Director; 2) At least 3 years of experience in digital or information technology experts in universities; 3) master's degree or above.

(4) The experts for evaluating the suitability and feasibility of the digital management improvement purpose model in Guangxi universities are 7 senior management personnel from Guangxi universities. The qualifications of the experts are as follows: 1) At least 10 years of relevant work experience in university management in Guangxi; 2) Familiar with the content and process of digital management in universities; 3) Doctoral degree or above; 4) Associate professor or above professional title.

3.4 Research Variables

The variables in this research are the digital management ability of Guangxi University management, digital teaching management system, digital scientific research management system, digital student management system, and digital campus security management system.

3.5 Research Instruments

Research instruments included 1) a questionnaire, 2) a structured interview, and 3) an evaluation form.

(1) Questionnaire

The questionnaire was the instrument to collect the data for objective one, the criteria for data interpretation based on a five-point Likert's (1932) scale. The index of objective congruence (IOC) of the questionnaire was examined by three experts. The index of objective congruence (IOC) was 0.67 to 1.00. The reliability of the questionnaire was obtained by Conbach's Alpha Coefficient, the reliability was 0.927. The questionnaire was applied to 148 school managers in 20 public universities in Guangxi.

(2) Structured Interview

A structured interview was the instrument to collect the data for objective two. Invite 12 main leaders of digital management functional departments in universities in Guangxi to conduct interviews. The structured interview was based on a questionnaire survey, each system has two outlines, select the lowest score in the questionnaire as the first interview outline for each system, and the opinions and suggestions on the system development guidelines as the second outline.

(3) Evaluation Form

The evaluation form was the instrument to collect the data for objective three. To evaluate the suitability and feasibility of the purpose model for improving digital management in universities in Guangxi. The researcher invited 7 experts to evaluate it, and the invited experts have certain experience and rich theories in the field of digital management at Guangxi universities. The data interpretation for average value is based on Likert (1932).

4. Data Collection

The researcher distributed the questionnaire to 148 advisors. A total of 148 questionnaires can be returned, accounting for 100%. The interview time for each leader was about 30 minutes, and the researchers had a detailed exchange with leaders on the current situation. Researchers organize and summarize the content of expert evaluations and summarize the experts' guidance on improving the suitability and feasibility of digital management models in universities in Guangxi.

5. Data Analysis

The data analysis in this research, the researcher analyzes the data by package program, as follows:

The questionnaire was analyzed by average value and standard deviation. The structured interview was analyzed by content analysis. The evaluation of the suitability and feasibility was analyzed by average value and standard deviation.

6. Results

The researcher analyzed the data in 3 parts as follows:

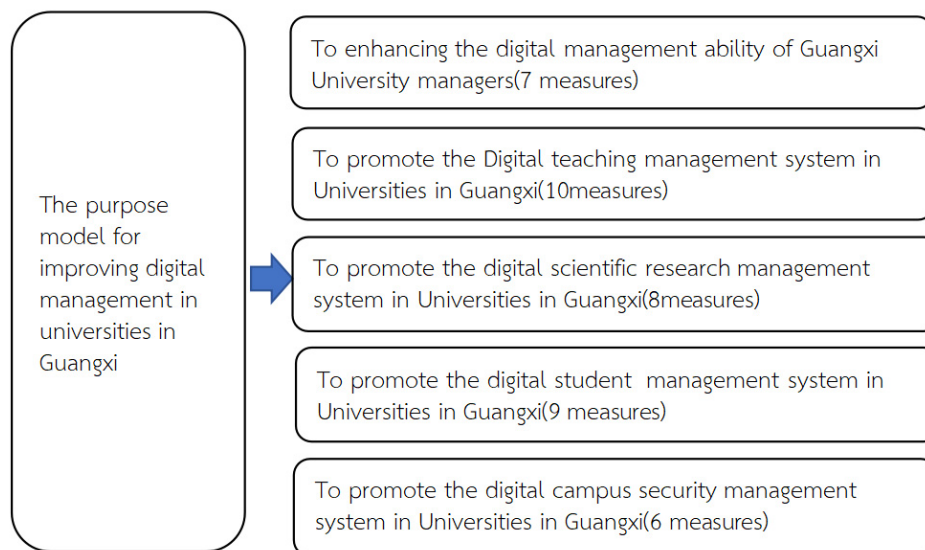
Part 1: The analysis results about the current situation of digital management in universities in Guangxi. Presented the data in the form of average value and standard deviation.

Table 1. The Average Value and Standard Deviation of the Current Situation of Digital Management in Universities in Guangxi in Five Aspects

(n = 148)					
NO	Digital management in universities in Guangxi	\bar{X}	S.D.	level	Rank
1	Digital Management Ability of Guangxi University Managers	3.82	0.98	high	4
2	Digital teaching management system	3.82	0.99	high	3
3	Digital scientific research management system	3.81	0.97	high	5
4	Digital student management system	3.87	0.98	high	2
5	Digital campus security management system	3.88	0.95	high	1
Total		3.84	0.97	high	

Table 1 found that the current situation of digital management in universities in Guangxi consisting of five aspects was at a high level ($\bar{X} = 3.84$). Considering the results of this research aspects ranged from the highest to lowest level were as follows: the highest level was the digital campus security management system($\bar{X} = 3.88$), followed by the digital student management system($\bar{X} = 3.87$), and digital scientific research management system was the lowest level($\bar{X} = 3.81$).

Part 2: The analysis results of the interview contents about the model for improving digital management in universities in Guangxi



Part 3: The analysis results of the evaluation of the suitability and feasibility of the purpose model for improving digital management in universities in Guangxi. Presented the data in the form of average value and standard deviation.

Table 2. The Average Value and Standard Deviation of the Evaluation of the Suitability and Feasibility of the Purpose Model for Improving Digital Management in Universities in Guangxi Consisting of Five Aspects

(n = 7)

No	The purpose model for improving digital management in universities in Guangxi	Suitability			Feasibility		
		\bar{X}	S.D.	level	\bar{X}	S.D.	level
1	To enhancing the digital management ability of Guangxi University managers	4.31	0.73	high	4.42	0.60	high
2	To promote the digital teaching management system in Universities in Guangxi	4.42	0.58	high	4.54	0.56	highest
3	To promote the digital scientific research management system in Universities in Guangxi	4.23	0.63	high	4.39	0.57	high
4	To promote the digital student management system in universities in Guangxi	4.22	0.70	high	4.27	0.68	high
5	To promote the digital campus security management system in universities in Guangxi	4.12	0.73	high	4.38	0.59	high
	Total	4.26	0.67	high	4.40	0.60	high

Table 2, the suitability, and feasibility of guidelines for the development of the purpose model for improving digital management in universities in Guangxi consisting of five aspects were at a high level with values between 4.12 and 4.54, which means the guidelines for the purpose model for improving digital management are suitability and feasibility.

7. Conclusion

The research in the purpose model for improving digital management in universities in Guangxi. The researcher summarizes the conclusion into 3 parts, details as follows:

Part 1 The current situation of digital management in universities in Guangxi.

The current situation of digital management in universities in Guangxi in five aspects is at a high level. Considering the results of this research aspects ranged from the highest to lowest level were as follows: the highest level was the digital campus security management system, followed by the digital student management system, and the digital scientific research management system was the lowest level.

Part 2: the purpose model for improving digital management in universities in Guangxi.

The purpose model for improving digital management in universities in Guangxi has five aspects, which contain 40 measures. There are 7 measures to enhance the digital management ability of Guangxi University managers, 10 measures to promote the digital teaching management system in Universities in Guangxi, 8 measures to promote the digital scientific research management system in Universities in Guangxi, 9 measures to promote the digital student management system in Universities in Guangxi, 6 measures to promote the digital campus security management system in Universities in Guangxi.

Part 3: the suitability and feasibility of the purpose model for improving digital management in universities in Guangxi.

The suitability and feasibility of guidelines for the development of the purpose model for improving digital management in universities in Guangxi in five aspects were at a high level with values between 4.12 and 4.54, which means the guidelines for the purpose model for improving digital management are suitability and feasibility.

8. Discussion

The research in the purpose model for improving digital management in universities in Guangxi. The researcher summarizes the conclusion into 3 parts, details as follows:

Part 1 The current situation of digital management in universities in Guangxi

The current situation of digital management in universities in Guangxi in five aspects is at a high level. Considering the results of this research aspects ranged from the highest to lowest level were as follows: the highest level was the digital campus security management system, followed by the digital student management system, and the digital scientific research management system was the lowest level.

In the current situation, the digital management ability of Guangxi University Managers is at a high level. This is because in Guangxi, after a period of development, colleges and universities in Guangxi have successively established their digital campus management systems to conform to the trend of The Times. Digital construction of colleges and universities in Guangxi has become an important goal of the reform and development of the education industry, and the ability of digital management of college administrators in Guangxi has been improved to a certain extent. Related to the concept of Chen (2018), pointed out that digital management can make university management work break through the limitation of time and space. It makes communication between students, teachers, and administrators more convenient and quicker, promotes the implementation of educational administration work more efficiently, improves the traditional management mode, and improves the management level of colleges and universities. However, at present, there are still some deficiencies in the management of colleges and universities, which mainly show that managers have an insufficient understanding of management digitalization, the action plan for management digitalization is not comprehensive, and the quality of management team digitalization management needs to be improved. This is also important content for constructing and improving the target mode of digital management in Guangxi universities, and it is necessary to plan the action plan as an important content.

The current situation of digital teaching management in Universities in Guangxi is at a high level. This is because the digitization of educational administration is the foundation of the digitization of university management, which is the key to realizing modern education. The level of digital campus construction directly affects the level of school running and determines the reputation of the school. It is very important to strengthen the digital construction of educational administration management for the development of the school. Related to the concept Song (2022), pointed out that digitization of teaching management in colleges and universities can effectively improve the efficiency of educational administration management. It is necessary to strengthen the application of educational administration platforms, accelerate the development of educational administration modules, and accelerate the construction of digital talent teams, to promote the construction of digital teaching management mode in colleges and universities more stably and efficiently, and facilitate the guidance of students' graduation thesis. Under the influence of traditional management mode, there are still some problems in the digital construction of Guangxi universities, such as not paying attention to digital construction, imperfect management systems, outdated service concepts, and unclear digital path. Colleges and universities must promote the digital construction of teaching management step-by-step plans according to their actual situation and form a new teaching management model.

The current situation of digital scientific research management in Universities in Guangxi is at a high level. This is because of the acceleration of the construction of digital campuses, and the continuous strengthening of college office automation systems, the role of scientific management is becoming more and more important, and the use of scientific research digital management has become an important target management work in the construction of colleges and universities in Guangxi. Related to the concept of Wang (2021), pointed out that with the continuous promotion of the reform of domestic higher education and the continuous deepening of modern education management, it has become an urgent reform to realize the network, information, and modernization of comprehensive scientific research management. The construction and application of the Internet-based digital platform for university scientific research management has comprehensively improved the efficiency and level of scientific research performance management and achieved dynamic management. It is urgent to make the management of scientific research performance more standardized and scientific and to establish a scientific and dynamic network management system to reflect the system. Today, with the rapid development of science and technology, scientific research activities and the research ability of colleges and universities have become important evaluation indicators of the comprehensive ability of colleges and universities, which makes the scientific research management, service and statistical work of colleges and universities also increase dramatically day by day, and the workload continues to increase and become heavy. A digital scientific research management system can effectively improve the efficiency of scientific research management and promote the high-quality development of colleges and

universities in Guangxi.

The current situation of digital student management in Universities in Guangxi is at a high level. This is because the digital student management system can simply and efficiently modify, query, and maintain the student's file information and data, which makes student information management more efficient and efficient. Related to the concept of Zheng (2019), pointed out that the student digital management system can automatically manage student work, realize information, scientific and standardized management, reduce the work intensity of school administrators, improve work efficiency, and realize the sharing of information and data, providing a basis for school management decisions. In the design and development of the digital management system for university students in Guangxi, on the one hand, the pertinence of the system should be enhanced, and the modular design should be optimized to enhance the adaptability of the system.

The current situation of digital campus security management in Universities in Guangxi is at a high level. This is because the digital campus has completed its initial construction and operation in Guangxi colleges and universities, and plays an increasingly important role in teaching, scientific research, student management, administrative management, and logistics support. A related concept Wu (2018), pointed out is that a LAN digital campus, its security risks may come from inside or outside the campus, security problems are mainly computer viruses, confidential information disclosure, unauthorized access malicious attacks, etc. These problems disrupt the entire network order at the same time, will bring immeasurable security risks to the digital campus system. Therefore, in the following construction, Guangxi University administrators should perfect the establishment of specialized institutions to provide digital services for teachers and students of the whole school to ensure the effective operation of digital campus security management.

Part 2: the purpose model for improving digital management in universities in Guangxi.

Researchers have proposed the purpose model for improving digital management in universities in Guangxi was five aspects, detailed as follows:

To enhance the digital Management Ability of Guangxi University Managers. Guangxi University administrators are the main body to implement digital management, and their digital management ability determines the actual effect of digital management in Guangxi universities. Related to the concept Wu (2022), pointed out that in the context of the digital era, university governance is also faced with a new proposition of transformation. The digital transformation of university governance involves not only the introduction of new technologies but also the transformation of the governance concept and governance ability of university administrators after data empowerment, which is an overall reshaping of the traditional governance model of managers. To improve the digital management of Guangxi colleges and universities, we must first cultivate and improve the ability of digital management of Guangxi colleges and universities administrators, so that all aspects of digital management can be carried out smoothly.

To promote the digital teaching management system in Universities in Guangxi. As an important aspect of deepening the reform of colleges and universities in Guangxi, school leaders, all teachers, and students need to fully realize the importance of digitization of educational administration, change traditional concepts, and devote themselves to the tide of digitization of educational administration. Related to the concept Xue (2022), pointed out that with the deepening of China's educational reform, the management mode and method of educational administration are also changing quietly in the tide of digitalization. It is an inevitable trend to use digital means to promote teaching management, reform the educational administration system, and establish an efficient and educational administration system, to promote university teaching management to achieve a qualitative leap. Only with full participation and construction of all staff can the digitization of educational administration in Guangxi colleges and universities realize its maximum function and truly realize digitization.

To promote the digital scientific research management system in Universities in Guangxi. The digital scientific research management system considers the concept of combining daily scientific research management and statistics, seamlessly accessing the information needed for scientific research statistics in Guangxi colleges and universities in all aspects of management, give full play to the advantages of the information system, and reduce the burden of scientific research management personnel and scientific research teachers in Guangxi colleges and universities. Related to the concept Zhang (2020), pointed out that the digital scientific research management system can put forward the required data model and the exact analysis view of the project progress, provide the scientific research authorities with the necessary resources in the management process, provide timely help to scientific research management and other high-quality services, and bring a qualitative leap to improve the scientific research efficiency and management of universities. The digital scientific research management system of universities in Guangxi realizes the most scientific and efficient management of scientific research work, effectively improves the work

efficiency and quality, and is conducive to the information exchange between the scientific research departments and teachers at all levels and realizes the resource sharing well.

To promote the digital student management system in Universities in Guangxi. The digital student management system realizes the management of students' daily information, reduces the intensity of management, improves management efficiency, and ensures the effective and convenient realization of college student management. Related to the concept Lu (2017), pointed out that with the expansion of college enrollment, the size of students becomes larger and larger, the amount of student information management becomes larger and larger, the difficulty of student management increases, and the task of student management becomes heavier and heavier, which requires colleges and universities to change the traditional way of student management. At present, with the continuous popularization of digital technology, colleges, and universities in Guangxi have strengthened the construction of digital infrastructure, provided material guarantees for the construction of college student digital management system, accelerated the digitization of college student management, and improved the efficiency and modernization level of college student management.

To promote the digital campus security management system in Universities in Guangxi. Digital campus security management contains the meaning of campus internal security management and campus network security management at two levels, a broader concept from time and space. It is no longer limited to the hardware environment and network equipment in the campus network but is based on the traditional digital campus information network, to build a virtual education environment, expand the time and space dimension of the real campus, and integrate the on-campus security monitoring with the network and database security. Related to the concept Li (2018), pointed out that digital campus is a broader concept from time and space. It is no longer limited to the hardware environment and network equipment in the campus network, but a virtual education environment built based on the traditional digital campus information network, which expands the time and space dimension of the real campus. Digital campus security management Security risks may come from inside or outside the campus, security problems are mainly computer viruses, confidential information disclosure, unauthorized access malicious attacks, etc. Universities in Guangxi must continuously enrich and improve Digital campus security management and establish all-round and multi-level security protection measures.

Part 3: the suitability and feasibility of the purpose model for improving digital management in universities in Guangxi.

The researcher invited 7 experts to evaluate the purpose model for improving digital management in universities in Guangxi, 7 experts are from Guangxi University, Guangxi Normal University, Guangxi Medical University, Guilin University of Electronic Technology, Guilin University of Technology, Guangxi University for Nationalities and Guangxi University of Finance and Economics. The invited experts have rich management experience and are very familiar with the current situation of digital management of universities in Guangxi. They clearly understand that the digital era provides major opportunities and new driving forces for the development of universities in Guangxi, helps to promote the improvement of the level of universities in Guangxi, the effective allocation of resources, and promotes the standardization, normalization, and scientific management of universities in Guangxi. The data interpretation for average value based on Likert (1932), the suitability and feasibility of the purpose model for improving digital management in universities in Guangxi five aspects were at a high level with the values between 4.12 and 4.54, which means the purpose model for improving digital management in universities in Guangxi are suitability and feasibility.

9. Recommendations

1. Establish a unified data management system

Ensure consistent data collection, storage, and access across all departments.

2. Implement data sharing

Facilitate collaboration and information exchange between different departments.

3. Enhance data security measures

Protect sensitive university data from unauthorized access or misuse.

4. Provide comprehensive training for staff

Train staff on how to use digital tools and best practices for data governance.

5. Establish a digital governance center

Oversee the implementation and maintenance of digital governance initiatives.

10. Future Research

Widening the financing channels of digital management projects in Guangxi universities. The construction of a digital management system in Guangxi universities needs a large number of basic network setups and information management platform construction, the utilization rate of infrastructure funds, the growth rate of information management talents, the effectiveness of efficiency evaluation, the growth rate of information training, and the growth rate of information resources have important effects on the funds of colleges and universities. Therefore, the University Digital Management Project needs to broaden the university financing channels, to achieve the university digital management construction funds to diversify the collection and investment and improve the investment. In the future, we can increase the funds for the digital management of universities in Guangxi by increasing government financial input, cooperating with enterprises, and accepting alumni donations.

Innovative research methods: this research method mainly uses document analysis, questionnaires, and structured interviews. In the future, new research methods can be explored on this basis, such as empirical analysis and case studies, to make up for the shortcomings of the existing research methods.

Increase the number of samples and coverage: this study takes the managers of 20 public universities in Guangxi as the sample and has not yet achieved the full coverage of all universities in Guangxi, further expand the coverage, increase the sample size, further improve the reliability and validity of research results.

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