

# Research on the Development Needs of Campus Life Campus Public Platform Based on The Perspective of College Students

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**Abstract:** This paper focuses on the development requirements of a campus life communication platform based on college students' perspectives. With the rapid development and widespread adoption of information technology, mobile internet has become an indispensable part of college students' campus life. However, the existing campus communication platforms on the market lack practicality and convenience, failing to meet the diverse needs of college students effectively. Therefore, there is a need to develop a campus life communication platform that is both practical and convenient from the perspective of college students. By conducting questionnaire surveys and collecting user feedback, we validated and improved our proposed requirements and design. The results indicate significant potential and promotional value in conducting research on the development requirements of a campus life communication platform based on college students' perspectives.

**Keywords:** College students campus life pass campus public platform demand.

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## 1. Introduction

With the rapid popularity of smartphones, smartphone-based campus communication platforms have experienced significant development in recent years. Compared to general commercialized campus platforms, smart campus communication platforms targeting university students possess unique characteristics. Different types of campus communication platforms not only feature their own designed application software functionalities but also exhibit attributes of media to a certain extent, making them fall into the category of new media. Currently, there is no accurate statistical data on the number of campus communication platforms being used in domestic universities. However, it is certain that due to the low technical barriers and cost requirements for developing campus communication platforms, the number of platforms adopted will enter a phase of rapid growth in the near future, driven by corresponding demands and government policies encouraging college students' independent innovation and entrepreneurship.

As the digitalization of schools advances, various applications based on campus networks are continuously developed and deployed, revealing emerging issues in the construction of digital campuses. For example, certain campus-oriented WeChat public platforms currently suffer from unclear positioning, inability to scientifically determine their target audience and their reading needs, and a lack of emphasis on feedback from the audience's reading experience[1]. Additionally, various application systems and departments lack data standards, resulting in data duplication and inconsistent information across departments. Some businesses exploit students for financial gain, preventing students from fully accessing certain information and requiring them to allocate a portion of their limited living expenses to others. Obtaining information becomes extremely challenging for school departments and administrative departments, and effective data resources cannot be shared in

a timely manner, leading to low utilization of data assets. Students are the future of our nation, and interpersonal interactions among college students contribute to their physical and mental well-being and the realization of their personal values. However, in the campus environment, many students lack avenues to find like-minded friends to engage in meaningful activities together. Our team is committed to developing a campus communication platform that is explicitly positioned for college students, focusing on positive and proactive social interactions. In conjunction with the current national attention to student education, sports, and work, we have established three distinctive sections: "Study Together," "Exercise Together," and "Part-Time Jobs Together." The platform aims to promote healthy social interactions and comprehensive development among college students, thus ushering in a new era of campus socialization.

## 2. Design Concept of Campus Life Communication Platform

1 High Efficiency and Accuracy In the current context of large student populations and dispersed academic, social, and recreational activities on university campuses, students often face the challenge of quickly finding like-minded companions. Our research focuses on a campus communication platform that enables students to efficiently and accurately connect with individuals who share the same plans and objectives at a given time. With stricter network management and real-name requirements for online social interactions, trust can be established among college students. Virtual social spaces have formed numerous communities of college students with similar interests or experiences, fostering a sense of belonging, enhancing individual team awareness, and facilitating mutual trust[2].

2 Expand Social Circles and Foster Positive Interpersonal Relationships Psychologists widely recognize that positive interpersonal relationships are a key indicator of mental well-being. The campus communication platform we are studying

facilitates effective and high-quality expansion of students' social circles, aiding them in developing healthy values and relationships.

3 High Security and Minimal Risks Our platform implements a registration process that utilizes real-name authentication through student enrollment records, maximizing user security and minimizing the potential for harassment or other safety concerns.

4 Novel Product and New Direction Through detailed market research on campus social software for college students, we have discovered that there is currently no similar platform specifically targeting student academic and social life, based on offline activities. Therefore, considering the current market landscape, our campus communication platform has the potential to lead campus networking applications into a new development model and future direction.

### 3. Demand Survey and Its Results

#### 3.1. Survey Design

The author conducted a survey on the demand of campus

**Table 1.** Results of descriptive statistical analysis of socio-demographic variables of the questionnaire  
Frequency Analysis

Variables	Options	Frequency	Percentage	Average value	Standard deviation
Gender	Male	96	46%	1.54	0.50
	Female	113	54%		
Grade	Freshman year	20	10%	2.42	0.87
	Sophomore	111	53%		
	Junior	53	25%		
	Senior Year	21	10%		
	Graduate and Doctoral Students	4	2%		

(2) Reliability and validity analysis of the questionnaire

Reliability, that is, the reliability and stability of the questionnaire, is to ensure that the scale questionnaire can be carried out in a stable manner.

The scale is a repeatable indicator. The higher the reliability

public platform through questionnaires. 15 questions were designed, 15 objective questions included information about the respondents and questions about information exchange platform, which were distributed to all students through the questionnaire star app. 209 questionnaires were collected, and 209 valid questionnaires were returned.

#### 3.2. Analysis of investigation methods

(1) Descriptive statistical analysis

The table below shows the frequency analysis table for gender and grade level, where frequency is the number of times an option appears in the sample and percentage is the proportion of the number of times that option appears in the total sample. According to the table, it can be seen that in this sample, 54% are female and 46% are male. As for the grades, sophomores accounted for 53%, juniors for 25%, freshmen for 10%, seniors for 10%, and graduate students and PhDs for 2%.

of the scale, the more stable the scale. Commonly used methods to measure the reliability of Likert scales are Cronbach's coefficient method (Cronbach's alpha).

The software used spss version 27 for the reliability and validity analysis process.

**Table 2.** Reliability analysis results

Reliability analysis						
Options	Average of scales after deletion of items	Scaled variance after removal of terms	Corrected term to total correlation	Square multiple correlation	Clone Bach Alpha after deleting items	Standardized alpha
How do you think the campus information should be presented in the campus public platform?	16.53	6.02	0.077	0.028	0.064	
What information do you usually follow on campus public platforms?	17.21	6.042	-0.012	0.028	0.141	
How much do you need the campus information function provided by the campus public platform?	15.58	6.062	0.175	0.053	0.015	
How often do you think the campus information in the campus public platform should be updated?	17.27	5.238	0.043	0.009	0.091	0.158
What is your level of demand for the social features provided by the campus public platform?	15.26	6.195	0.037	0.013	0.095	
Which platform do you usually use to order take-out most frequently?	17.04	6.268	-0.065	0.02	0.19	
How helpful do you think it is to provide campus notifications in the campus public platform?	16.98	5.956	0.097	0.036	0.049	

Where the corrected item-total correlation values between -1 and 1 are used to describe the relationship between each question and the overall score. The squared multiple correlations describe the amount of explanation each question has for the overall score, and the Cronbach Alpha indicates the internal consistency the questionnaire has.

In this analysis, the corrected term-total correlations for all

questions were below 0.1, indicating a weak association between them. The squared multiple correlation values ranged from 0.009 to 0.053, indicating that each question explained a small amount of the overall score. Cronbach Alpha values ranged from 0.015 to 0.19, indicating that the questionnaire had some internal consistency.

**Table 3.** Total statistical analysis of items Table

Item Total Statistics					
Options	Average of scales after deletion of items	Scaled variance after removal of terms	Corrected term to total correlation	Square multiple correlation	Cronbach Alpha after deleting items
What is your level of demand for the takeaway information function provided by the campus public platform?	17.11	7.454	0.118	0.033	0.477
What is your level of demand for the localized lifestyle services provided by the campus public platform?	17.81	6.133	0.284	0.092	0.395
What is your demand for the second-hand idle information feature on the campus public platform?	17.09	6.618	0.277	0.092	0.404
What is your level of demand for the learning information functions provided by the campus public platform?	17.62	6.342	0.31	0.115	0.384
What is your level of demand for the part-time job information function provided by the campus public platform?	17.67	6.894	0.154	0.042	0.468
What is your level of demand for the traffic and travel information features provided by the campus public platform?	18.08	5.792	0.268	0.077	0.406

0.466

According to the results, the Cronbach Alpha coefficient for this data set is 0.466, indicating that these questions have a relatively high confidence level. In addition, the mean of the scales after removing items, the variance of the scales, the corrected item-total correlation, and the squared multiple

correlation can also be used to measure the quality of each question and their correlation with the totals. The credibility and validity of these questions can be further assessed based on these metrics.

(3) Validity analysis

**Table 4.** Results of validity analysis KMO and Bartlett's test

The number of KMO sampling suitability measures.	.607	
Bartlett's sphericity test	Approximate cardinality	121.038
	Degree of freedom	78
	Significance	.001

According to the results of the above exploratory factor analysis, the coefficient result of KMO test is 0.607. The coefficient of KCMO test takes confidence in the word 0-1, and the closer to 1 means the better the validity of the questionnaire.

The significance of this test is infinitely close to 0. The original hypothesis is rejected, so the questionnaire has good validity, as can also be seen based on the fisherability of the sphericity test.

## 4. Issues with Current Campus Public Platforms

### 4.1. Proliferation of Campus Public Platforms and Poor Convenience

In the current era of "Internet+", using campus public platforms to manage students' academic and daily lives in a digitized and intelligent manner is a modern and convenient

approach. However, the excessive proliferation of campus public platforms has led to the need for students to download multiple platforms to meet various requirements, which is inconvenient and takes up phone storage space, and may even expose them to potential risks, such as mobile viruses. Many students find the use of campus public platforms inconvenient and burdensome. Apart from being required to use the platforms to record academic credits, different activities such as laundry, running, online courses, and water supply require the use of various campus public platforms. These platforms often have unfriendly interfaces, cumbersome operations, and a poor user experience, causing unnecessary trouble and inconvenience for students.

### 4.2. Poor Security of Campus Public Platforms

Some low-quality campus public platforms have serious issues, such as "missing credit records." Furthermore, some campus public platforms are mandatory installations without

practical value, but they frequently display advertisements. The large number and varying quality of these platforms pose significant security risks and vulnerabilities, such as stealing mobile data and leaking personal privacy information. This not only inconveniences students but also jeopardizes their personal information security and rights.

### 4.3. Lagging Campus Information

Currently, students' means of communication are mostly limited to acquaintances or friends, which restricts the ability of students to connect with others who have similar needs. Everyday activities like hanging out, traveling, and forum discussions among students require timely information. However, the existing information providers no longer meet students' demands for precise positioning and timeliness.

## 5. Strategies and Recommendations for Campus Public Platforms

### 5.1. Strengthen Platform Management and Improve Convenience

To address the issues of excessive proliferation and poor convenience of campus software, it is advisable to integrate various functional modules into a single platform, thereby avoiding the need for users to frequently download multiple applications. This platform can enhance user convenience and experience through a user-friendly interface and intelligent design. For example, the development of a "Campus Life App" can integrate various functions required for campus life, such as credit inquiry, course selection, laundry reservations, and running records, allowing students to conveniently meet their daily life needs in one place. Additionally, the platform should focus on software updates and optimization to ensure performance and stability.

### 5.2. Diversify Product Offerings and Enhance Competitiveness

To enhance product competitiveness, campus public platforms should continuously improve their development technology, enhance the performance and user experience of existing functions, and expand the range of services to cover various campus services, thereby increasing the overall competitiveness of the product line and gaining the trust and favor of more users. Additionally, listening to user feedback and continuously optimizing product design and functionality will ensure the best user experience. Through these efforts, we believe that the "Campus Life App" will become one of the most trusted and favored campus service platforms by users.

### 5.3. Comprehensive Improvement of Campus Public Platform Functionality

To enhance the security of campus software, schools can take the following measures: establish strict review mechanisms to ensure that all campus software meets certain security standards, and require all software providers to sign security agreements clarifying data protection and privacy policies. By actively introducing new technologies such as artificial intelligence and big data, the speed of information

collection and processing can be accelerated to improve information timeliness. As a medium for disseminating ideas on campus, we should customize suitable modules based on the school's history and campus culture, rather than simply replicating the official website. Innovative layout modules should be created as well<sup>[3]</sup>. Additionally, schools can collaborate with various sectors of society to establish campus-industry cooperation platforms, strengthen employment guidance and practical education for students, improve students' competitiveness in the job market, and provide students with more practical information and resources.

### 5.4. Strengthen Campus Social Networking

Social networking features will become an essential part of the platform, allowing users to interact with each other through posting information and engaging with other users. In addition to enjoying campus services online, users can socialize through the platform system, engage in offline interactions, and share authentic experiences of campus life. Based on this foundation, we will explore new models and features to further enhance social networking, allowing users to experience the joy of campus social interactions more easily and pleasantly.

## 6. Conclusion

As an internet company primarily focused on serving university students, our company is dedicated to providing technical services such as website development, mobile app development, and system development. Our mission is to keep up with the current technological era and use technology to transform campus life. By leveraging internet technology, our company aims to connect each student through an online platform. Our main business, the "Campus Life App," provides university students with various reliable and secure information, while also addressing the issue of high intermediary costs targeted at the university student demographic, allowing students to save money for other necessary purposes. Our goal is to facilitate effective communication of various information between the company, students, and merchants, truly achieving our mission of "making life more convenient and bridging the gap between you and me."

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