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DETERMINATION AND ANALYSIS OF PARAMETERS THAT INFLUENCE THE DESIGN OF THE STUDENT CAMPUS MANAGEMENT INFORMATION SYSTEM

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This article presents a detailed analysis of important parameters when designing information systems for campus management. The main requirements and characteristics of each parameter directly affect the efficiency, flexibility and user-friendliness of the system. In particular, the parameters of flexibility and scalability are analyzed, which allow the system to respond to changes in the number of users and data volume and to operate stably even under peak loads. From the point of view of technical support, timely response to user problems and ensuring continuity of service are taken into account. This is especially important in large campuses.

Special attention is paid to the accessibility of the system, and it is necessary to ensure that all users have easy access to the information and services they need, regardless of their physical capabilities, device type or connection status. In addition, this article emphasizes the importance of providing feedback. By providing feedback, the system can receive feedback from users and adapt the system to their needs. The article also emphasizes the importance of data security settings, such as protecting users' personal data and ensuring transaction confidentiality.

In addition to the analysis of these parameters, the article identifies the main advantages of using information systems on university campuses: simplification of housing management, automation of financial transactions, increased security, optimization of technical maintenance, development of internal communication and support of academic activities. The use of such a system allows to significantly reduce the administrative burden, improve the user experience and increase the level of comfort and safety of students.

In general, as the results of this study have shown, this system not only satisfies the needs of different categories of users, but also provides the opportunity to integrate with other systems, and the constant updating and improvement of such systems contributes to the creation of a modern, integrated and secure environment that meets the needs of students, administrators and other users and contributes to the effective management of resources on campuses.

Keywords: *design, information system, influencing factors, participants in the educational process, campus, settlement, communication.*

Problem statement. Modern production and service technologies, production of products and services are unthinkable without information technologies that satisfy the information needs of management, production, supply, trade, sales and other functional units. Information technologies allow one to effectively manage all types of enterprise resources. It is timely and relevant information that allows one to concentrate resources in the right place to implement the main priority tasks at the right time. In addition, information systems expand the professional capabilities of specialists and allow them to carry out the activities of business entities more efficiently, purposefully, economically and effectively. The role of information technologies in the modern world is strategic, they contribute to the economy, adequately respond to market dynamics, preserve and deepen competitive advantages to achieve maximum profit. The use of information systems allows one to radically change the management style and significantly increase the efficiency of the company's work [1]. The main directions of improving the management of the organization are the creation of information systems (IS) based on the latest hardware and software, information technologies, distributed data processing in networks, the use of economic and mathematical methods and models, decision support systems. The purpose of IS is to describe the studied object, its conditions and interactions, expressed using certain indicators. IS is designed to provide the management body with the necessary and sufficient information for decision-making in a timely manner, the quality of which ensures the very effective work of management and its units [2]. The educational sector has not been left aside. The use of information technologies in the educational process became especially noticeable during the introduction of quarantine and martial law in Ukraine.

Analysis of recent research and publications. As for the analysis of recent research and publications, we can say that they mainly concern the introduction and research of information technologies in the educational process. Thus, in his work [3], the author considers the issue of comparing the use of information technologies with traditional ones, noting that the perception of educational information is significantly improved due to the visualization of information. Information technologies also, as studies have shown, increase motivation for learning. In the work [3] it is noted that when forming the professional training of students for obtaining higher education, it is important to use modern digital educational technologies based on the principles of personal activity and a competency-based approach. The problem of ensuring the quality of student learning in the digital educational space and distance learning was studied in the works of scientists [4-7]. The authors note in their research that the current state of professional training of higher education applicants requires the improvement of the digital educational

environment, which can ensure the effective formation of digital and research abilities of future software engineers, specialists in the field of computer science and not only. One of the components of the software and methodological support of the modern university environment is the creation and implementation of information systems aimed at the professional training of students. As for publications that would reveal the creation and functioning of information systems that relate to the educational process in general in universities, including the design and use of the information system for the functioning of the student campus, we did not find any. In our opinion, it is this combination of all information systems of the educational process that will provide ample opportunities for participants in the educational process to better adapt to receiving the most useful information and services for them.

Presentation of the main material.

To conduct our research, in our case, it would be best to conduct a survey among the participants in the educational process and determine, in their opinion, what factors influence the design of the campus management information system. From the survey, we identified the main factors of influence and will analyze them.

The “user” parameter is one of the key elements in the design of campus information systems. Identification and description of users helps to create effective interfaces, plan functions and set access levels.

The main categories of users are students, campus administration, security officers, security officers, technical personnel and parents of students. As for students, the following list of services should be provided for them: access to personal data, viewing the schedule, submitting applications for accommodation, requests for availability of places, reporting problems in rooms, participation in social events. Students, using the information system, need easy access to information about the status of applications for accommodation, the ability to receive notifications about important changes.

For the campus administration, the information system should provide for the management of applications for accommodation, monitoring the status of rooms, allocating resources (places in dormitories), generating reports, organizing events for students. The requirements for the system for administrators can be characterized by the following needs, namely a convenient information panel, the ability to view statistics on living space, monitor compliance with rules, analyze data about students.

As for security staff, for them the information system should provide access control to dormitories, registration of visitors, monitoring of security and violations. For them, the system should provide quick access to the student database; event and incident registration systems; violation notification systems.

The following users of the information system are technical personnel. For this category of users, the following capabilities should be provided: management of technical requests (repair, maintenance); inventory of equipment in student dormitories. The information system for this category of users should provide a convenient interface for registering repair applications and tracking their status; management of technical maintenance of the building.

Parents of students, it should be said that such a category of users is not always provided, some systems do not provide such services. But if, nevertheless, there is such a category, then for them the opportunity to receive information about the child's academic performance; access to data about the child's place of residence and health status should be provided. This information should be up-to-date and should provide information about living conditions, safety, availability of dormitories.

To ensure the protection of personal data and proper management of the system, access levels should be defined for each category of users. As for the access levels for these users, we can say the following that students can only have access to their data and functions related to their residence and activities. Of course, administrators should have access to all data and functions that manage the system. Security staff have access to visitor registration and security, but do not have the right to change student data. Technical staff have access to data on maintenance and repair requests. Parents receive limited information, for example, about their child's academic performance and residence status.

To use the system, each user must have an account to access the system, using a username and password to ensure access control. As for the system interface, in our opinion, the interface should be simple, intuitive and adapted to the needs of each category of users. The system should also provide administrators with the ability to generate various reports (dormitory operational status, technical problems, events, statistics). Summarizing the above, we can say the following that the "user" parameter is very important when designing campus information systems. This is due to the fact that they determine the proper organization of access, efficient use of resources, convenience for students and security of dormitories. Careful planning of different types of users and their rights ensures that the system will be as useful as possible for all participants in the process.

The next parameter that was identified as important for designing a campus management information system is its "functionality". The "functionality" parameter covers a set of functions and tools that the system should provide to different users to ensure effective management and service of students in student dormitories, as well as convenience and security on the campus. This parameter should allow all users to register in the system by creating an account and go through the authentication procedure to access the system, supporting different access levels.

The system should allow students to apply for accommodation in student dormitories via an online form indicating the date of arrival, room type, special requests, etc. Accordingly, administrators can review and process these applications, allocate places in the dormitory and change the status (approved/rejected) of applications. The next functionality of the system should be dormitory allocation. Regarding this feature, the system should provide automatic management of room allocation taking into account the needs of students (for example, international students, students with disabilities, etc.). The system should also display and manage schedules. Students should be able to view their personal schedule of classes and activities related to dorm life and view information about temporary restrictions or changes in the schedule (for example, water supply or repairs).

Another service functionality that the system should provide is the management of maintenance and repair requests. Students should be able to submit requests for repair and maintenance of technical equipment in their rooms (for example, problems with plumbing or electricity). Accordingly, technical staff can receive notifications about new requests, process them and update their status. Create reports on work performed and equipment inventory.

The next functionality that the system should provide is to provide communication mechanisms (notifications and alerts). This functionality of the system is quite important. The system should provide the ability to exchange notifications via SMS or email about critical situations (for example, violations of safety rules, emergency work in dormitories).

One of the important features of the system is security management. To do this, the system should provide: the ability to register visitors, control access to dormitories and check documents; surveillance using video surveillance cameras (where provided by the system); management and security services should be able to receive information about incidents and violations and can respond in real time.

Another feature of the system is the provision of payment and financial management. The system should be able to provide a service for students to pay for accommodation, utilities and other payments through the system, create account reports and manage payment transactions and track debts and automatically send reminders.

The system should also provide the ability to integrate with other university systems. The system should provide students with the ability to log in to different university systems using a single set of credentials.

Therefore, the functionality of campus information systems should be comprehensive, convenient and multifunctional for effective management of student accommodation, accommodation and training on the campus. The system

must support a high degree of process automation, save time for administrators and students, and ensure the safety and comfort of life in the dormitory.

The next parameter that was highlighted as important is security. Security is one of the most important aspects of developing a campus information system. This is due to the fact that the systems process sensitive information such as student personal data, financial transactions, residence and visitor data. Security ensures that this information is protected from unauthorized access, loss, damage and alteration. The system must protect the data. The database should have a security policy, including regular updates and patches, firewalls and intrusion detection systems (IDS). The latest encryption algorithms should be used to encrypt data (e.g. AES-256 for storage, TLS for transmission). The system should also provide for backup. Regular automatic backups of data should be configured to avoid data loss due to technical failures or attacks. The system should support a clear role model, where each user has access only to the data and functions that he needs. Students have access only to their own data, technical staff only to technical requests, and administrators to all data, including reports and statistics. All attempts to access the system should also be documented and monitored. All attempts to access the system should be logged so that they can be analyzed later. This allows one to detect suspicious activity and prevent unauthorized access attempts. The system should be protected against common web application attacks such as SQL injection, cross-site scripting (XSS), and cross-site request forgery (CSRF). This includes using reliable input processing methods. This requires using reliable input processing methods (e.g., parameterized SQL queries, input filtering and validation). At the network level, the system should also provide security (using secure data transfer protocols such as HTTPS, VPN for accessing systems from remote locations). Preventing DDoS attacks requires the use of appropriate mechanisms, such as infrastructure-level protection and traffic filtering services, to protect against distributed denial-of-service (DDoS) attacks.

To ensure proper security conditions, it is also necessary to ensure that servers and other components of critical infrastructure must be physically protected from unauthorized access (for example, the use of special access control rooms, video surveillance, access only for authorized persons). To eliminate vulnerabilities that can be used by hackers, regular updates of operating systems, server software, libraries and other components will be provided.

The system must comply with the requirements of personal data protection legislation, such as the General Data Protection Regulation of the European Union (GDPR). According to these requirements, personal data retention requirements must also be observed. Student personal data must be stored only as long as necessary for the system to perform its functions, and must be encrypted at all stages of storage and transmission.

In our opinion, to ensure data confidentiality and ensure security in general, it is quite important to train users and staff to work in this system. All users, including students, administrators, and technical staff, should receive training on security issues, including basic cyber hygiene (e.g., proper password use, avoiding phishing attacks).

Security is therefore a key consideration when designing campus information systems, as these systems deal with student information, financial data, technical requirements, and residential security. Careful planning and implementation of security mechanisms at all levels (from physical security to data and network security) can prevent abuse, preserve confidentiality, and provide protection against external and internal threats.

The next factor to consider when designing an information system is “integration.” Integration in the development of campus information systems refers to the ability of a system to effectively interact with other information systems, platforms, and technologies used on campus and beyond. Integration allows data to be collected, processed, and exchanged between different systems, resulting in more efficient management and a better user experience.

Integration reduces data duplication, increases process automation, facilitates administration, reduces the likelihood of errors, and provides greater convenience for students and staff.

The main areas of integration in campus information systems are: integration with university information systems; integration with financial and payment systems; integration with access control and security systems; integration with communication and notification systems; integration with library and cultural systems, and other systems.

Integration with online learning platforms such as Moodle allows students to have convenient access to class schedules, progress reports, and other academic data without having to log into different systems. Students can automatically register for courses, trainings, cultural and sports events organized by the university or campus administration. Integration with this system allows data to be synchronized across platforms.

Integration with payment systems (e.g., Privat24, PayPal, bank cards) allows students to pay for accommodation, utilities, fines, and other fees directly from the campus system interface. The system should integrate with the university's accounting system to automatically generate payment documents, charge accommodation fees, and receive and manage financial transactions.

As for access control and security systems, this system should integrate with access control systems in dormitories and rooms, and should allow students to enter rooms and buildings and register visitors using electronic student tickets or cards.

Having a student ID card allows a student to use the student ID card to access dormitories, the library, the cafeteria, and make payments on campus. Using email allows for automatic sending of electronic messages (e.g., confirmation of accommodation, payment reminders, information about available places in the dormitory, etc.).

Integration with the university library system allows students to access books and electronic resources using their account. For example, the ability to automatically block access to dormitories if a student has a debt to the library.

This system should provide the ability to integrate with the platform for registering for cultural, sports or academic events, allows students to register for events organized by the university or campus, and automatically receive notifications about changes or new events.

As it can be seen from the above, the integration factor is an important aspect of designing a campus information system, ensuring the smooth and efficient operation of various platforms that interact with each other. The implementation of integration between various university systems and third-party services increases process automation, reduces data duplication and reduces manual work of staff, which ultimately increases efficiency and convenience for students and administration.

The “mobility” factor in the development of campus information systems is to ensure convenient access to system functions and data from mobile devices such as smartphones and tablets. This includes adaptive design, development of mobile applications and optimization of processes so that students, administrators and other users can access the system at any time and anywhere.

An important aspect is mobility. This is due to the fact that students and employees are usually on the move and need quick access to information, including from mobile phones. With this system option, students will be able to apply for accommodation in student dormitories, view available rooms, pay for accommodation and request services without having to contact the administration via a mobile application or adaptive web version, access their personal information and view the status of their application for accommodation, class schedule, payment balances and reviews of dormitory services, submit requests for room repairs or problems (for example, plumbing or electrical malfunctions).

The development of special mobile applications for iOS and Android will allow users to send messages, register for events, view schedules and access financial information. If a mobile application is not planned, one can develop a responsive website that will be correctly displayed on devices with different screen sizes (smartphones, tablets). The website should be mobile-friendly and support all the main functions of the system. Using these software tools, the system will be able to send notifications to mobile phones or e-mail to notify users about payments,

changes in residence rules, registration deadlines, etc. It is important that access to mobile applications and web versions of the system is protected by multi-factor authentication to prevent unauthorized access. For greater convenience, mobile applications can be integrated with other university systems, such as electronic journals, learning platforms, and electronic access systems to the library and dining hall. Students will be able to access all university resources using a single mobile interface.

Mobile applications should have a convenient and intuitive interface on different types of devices. The interface should be adapted to the small screens of smartphones and tablets.

In conclusion, regarding this system parameter, we can say that it is an important parameter when designing campus information systems. This is due to the fact that mobility provides students, administrative staff and other employees with easy and convenient access to all functions and services at any time and from any place, on campus or outside. Convenient mobile access increases administrative efficiency, improves communication between students and administration and reduces the time spent on routine tasks. Mobile services also make the system more accessible and modern. This is important for students who are familiar with digital technologies in everyday life.

“Data analysis” when designing a campus information system is an important parameter that includes collecting, processing, interpreting and structuring data in order to build an effective and user-friendly system. This parameter includes several key components: data collection; user requirements analysis; data processing and segmentation; data analysis and visualization; trend detection and forecasting; security and confidentiality.

Thus, data analysis is an important parameter in the design process, ensuring the creation of systems that meet the real needs of users and contribute to effective campus management.

The parameter “technical support” in the design of campus information systems is a set of measures and processes aimed at ensuring the smooth functioning of the system and the rapid resolution of technical problems that may arise during use. The importance of technical support lies in providing users (students, staff and administration) with stable access to the system and prompt assistance in case of problems.

This parameter involves the creation of a technical support team responsible for the operation of the system, or the involvement of external experts. This includes support operators who respond to user requests, system administrators and developers who can solve complex technical problems. For the system to work properly, one should create user guides, answers, and FAQs to help users solve

simple problems on their own, without support. This will reduce the burden on technical support and improve the usability of the system.

One should also ensure that software updates, bug fixes, and system optimizations are performed regularly to improve the stability and performance of the system. This also includes security updates to protect your data.

One should collect user feedback and analyze technical support requests to identify common problems and improve the system. This can help create more effective support algorithms and make the system more intuitive for users. One should also develop a plan for recovering the system in the event of a major failure or data loss. This includes regular backups and testing of the recovery system.

Proper technical support ensures that campus information systems operate efficiently, resolve issues quickly, and provide a good user experience.

The next parameter that was identified as important is “flexibility and scalability.” The system should be easily modified and adapted to new requirements without the need for significant restructuring. This means that administrators and users can add or change functionality, such as new modules for managing services, such as online accommodation booking or integration with university learning platforms. With a modular system design architecture, functions can be divided into independent blocks (modules) that can be added or removed individually. For example, a system can have modules for accommodation management, payment systems, access control, etc. that function as independent elements. This makes it easier to add new features, update, and test the system.

Scalability of the infrastructure implies the ability to expand the system without compromising performance by adding server resources or expanding the user base. For example, the system should be able to operate efficiently even as the number of users and data increases, such as when the number of students on a campus increases or its expansion. The system should be able to create user profiles with different levels of access, for example, for administrators, students, and security personnel. This allows for easy configuration and restriction of access to different parts of the system according to the user's role. The developers of this system should provide the ability to automatically expand functionality and add new services based on the existing infrastructure. For example, the system can automatically expand as the load increases or automatically update modules without downtime for the user.

This system should have a flexible interface, which means supporting different platforms, such as mobile devices and desktop computers. The system should function the same for both mobile applications and web interfaces, allowing users to access critical information at any time.

Providing flexibility and scalability in campus information systems ensures that the systems are fully functional as the number of users increases and can easily adapt

to new requirements that arise over time. This makes investments in such systems more profitable and easier to manage in the long term.

"Technical support" in the design of campus information systems is a key element in ensuring the smooth operation of the system and the prompt resolution of technical problems. It helps maintain system stability, ease of use, and a positive experience for all users, including students, staff, and administration. For the proper functioning of the designed system, it is necessary to create or attract a team of specialists responsible for maintaining and developing the system. These can be operators who accept requests from users, system administrators who maintain the infrastructure, and developers who solve technical problems or add new features. For the proper functioning of the system, it is necessary that the system has the ability to provide a section with useful information for users (FAQs, instructions, guides, video tutorials) to help them solve typical problems without having to contact the support service. This not only reduces the load on technical support, but also allows users to quickly find answers to frequently asked questions. The system should provide receive feedback and improve, for this it should be possible to collect user feedback on the work of technical support and analyze typical requests. This can help improve the system, eliminate recurring problems, and improve the user experience.

Technical support is also responsible for ensuring the protection of users' personal data, including compliance with security standards. This includes providing secure communication channels, adhering to privacy policies, and keeping security systems up to date.

In general, technical support is the foundation for the stable operation of the campus information system, ensuring uninterrupted availability, rapid response to problems, and security for all users of the system.

"Feedback" is one of the key parameters when designing campus information systems, and user feedback (students, administration, and technical staff) helps to improve functionality, identify problems, and needs. Quality feedback helps to make the system useful and effective.

Feedback collection tools, such as feedback forms, questionnaires, and comment fields, should be implemented in the system. This could be built-in forms, web portal sections, or dedicated mobile apps for feedback. One should also consider providing multiple options for contacting management and technical support, such as email, chat, phone lines, or dedicated user portals. A variety of channels makes it easier to communicate with users with different needs and levels of technical expertise.

For feedback to function optimally, regular surveys should be conducted to assess satisfaction with the system, functionality, speed, and quality of technical support. This can help identify which aspects are working well and which need

improvement. It is important to organize and categorize all feedback received, for example by problem type (technical issues, functional limitations, user-friendliness) and priority level. This will help identify the most common problems and key aspects that need priority attention. Prompt response helps maintain user trust in the system and ensures a pleasant user experience. Feedback, even in anonymous form, is especially important for collecting criticism. Confidentiality can be guaranteed, allowing users to express their opinions openly and suggest realistic improvements.

Feedback in the design of campus systems is an important means of creating a user-friendly environment and ensuring that the system meets users' needs and expectations. This not only improves the quality of services, but also strengthens user trust and contributes to the efficient operation of the campus.

The last of the selected parameters, but by no means the least important, is "accessibility". Accessibility is a key parameter in the design of campus information systems, which aims to make them as convenient and accessible as possible for all users, regardless of their abilities, devices or conditions of use. A high level of accessibility promotes effective interaction between students, staff and administration and ensures equal access to information and services. The design of this information system should include the development of system interfaces that are convenient for users with disabilities. This includes the use of software elements that support people with visual and hearing impairments, such as screen readers, text editors and support for subtitles for video materials. Moreover, this system should ensure compliance with international accessibility standards, such as the Web Content Accessibility Guidelines (WCAG). This includes the correct use of colors, text descriptions of images, structured content and keyboard navigation. As all universities are implementing international mobility, this system should implement multilingual support in the system to ensure accessibility for international students and staff. It should also be remembered that this system can be used on different devices in the future, so the system should provide adaptive design. This ensures that the system will be equally convenient to use regardless of the type of device the user is using.

The system should be designed to operate without interruption in the event of technical failures or high loads. This includes the use of redundant servers, regular backups and rapid recovery in the event of a failure. The system should also be available 24 hours a day, 7 days a week to ensure that key functions such as room reservations, viewing schedules and paying for services are always available. This is especially important on university campuses where users' work schedules can vary.

Ensuring accessibility in campus information systems ensures that the system can be easily used by all users, regardless of their abilities or technical requirements.

This creates a level playing field for all students and staff, improves their experience, and contributes to the overall efficiency of the system.

Conclusion. The use of campus information systems has many advantages that contribute to the effective management of residential, administrative and academic processes. It can improve the experience of both students and administrative staff by automating tasks, facilitating communication and ensuring constant access to information. The main advantages of such a system include a number of campus functions. These systems allow one to easily manage information about occupancy, location and availability of rooms, as well as automate the booking and registration process. This in turn reduces the workload on administrators and allows students to view and select the options available to them. Users will be able to make payments online, receive invoices and reminders, and track financial transactions, reducing the burden on accounting and increasing transparency of payments.

Using this system, students will be able to receive information about class schedules, classroom locations, schedule changes and other academic news. This integrates campus life with the educational process and makes it more convenient for students.

Thanks to information systems, campuses will be able to better manage the use of energy resources and reduce unnecessary consumption. For example, by analyzing electricity and water consumption, it is possible to optimize the use of resources and reduce the impact on the environment. The automation of many routine processes, in turn, reduces manual work in the administrative department. This not only speeds up the provision of services, but also reduces the risk of human errors, improves the quality of service and streamlines work. Overall, campus information systems provide a high level of comfort for students, increase administrative efficiency, promote security and integration for all residents and employees. It is a tool that can create a modern, integrated and safe environment. Moreover, these are not all the advantages of using a campus information system.

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ВИЗНАЧЕННЯ ТА АНАЛІЗ ПАРАМЕТРІВ ЯКІ ВПЛИВАЮТЬ НА ПРОЕКТУВАННЯ ІНФОРМАЦІЙНОЇ СИСТЕМИ КЕРУВАННЯ СТУДМІСТЕЧКА

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У цій статті представлений детальний аналіз важливих параметрів при проектуванні інформаційних систем для управління студмістечках. Основні вимоги і характеристики кожного параметра безпосередньо впливають на ефективність, гнучкість і зручність системи для користувача. Зокрема, ми аналізуємо параметри гнучкості та масштабованості, які дозволяють системі реагувати на зміни кількості користувачів та обсягу даних та стабільно працювати навіть при пікових навантаженнях. З точки зору технічної підтримки, враховується своєчасне реагування на проблеми користувачів і забезпечення безперервності обслуговування. Це особливо важливо у великих студмістечках.

Особлива увага приділяється доступності системи, і необхідно забезпечити, щоб всі користувачі мали легкий доступ до необхідної їм інформації та послуг, незалежно від їх фізичних можливостей, типу пристрою або Статусу підключення. Крім того, у цій статті підкреслюється важливість надання зворотного зв'язку. Надаючи зворотний зв'язок, система може отримувати відгуки від користувачів і адаптувати систему до їх потреб. У статті також підкреслюється важливість налаштувань безпеки даних, таких як захист персональних даних користувачів і забезпечення конфіденційності транзакцій.

На додаток до аналізу цих параметрів у статті визначено основні переваги використання інформаційних систем в університетських студмістечках: спрощення управління житлом, автоматизація фінансових операцій, підвищення безпеки, оптимізація технічного обслуговування, розвиток внутрішньої комунікації та підтримка академічної діяльності. Використання такої системи дозволяє значно знизити адміністративне навантаження, поліпшити користувальницький досвід і підвищити рівень комфорту і безпеки студентів.

В цілому, як показали результати даного дослідження, дана система не тільки задовольняє потреби різних категорій користувачів, а й надає

можливість інтеграції з іншими системами, а постійне оновлення та вдосконалення таких систем сприяє створенню сучасного, інтегрованого та безпечного середовища, що відповідає потребам студентів, адміністраторів та інших користувачів та сприяє ефективному управлінню ресурсами у студмістечках.

Ключові слова: *проекування, інформаційна система, фактори впливу, учасники освітнього процесу, студмістечко, поселення, комунікація.*

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