

Sitnicki, M.

Taras Shevchenko National University of Kyiv,
Kyiv, Ukraine

DIGITALIZATION OF RESEARCH UNIVERSITIES

Digitization is a powerful tool for revitalizing the development of research universities. By leveraging technology, universities can streamline processes, increase efficiency, and provide a better experience for students, faculties, and staff. Specific effects of digitization are as follows:

- digitalization can provide access to online teaching and research resources, allowing universities to reach a wider audience and increase the visibility and reputation of their academic programs;

- through digital platforms, universities can offer virtual internships and cooperative education programs that can provide students with hands-on experience and connect them with industry partners;

- online learning tools and resources can help reduce the burden on teachers and provide a more personalized learning experience for students;

- digital databases and repositories can facilitate scientific collaboration between teachers and other universities and research institutions, providing a more seamless integrated research experience;

- digital communication tools and social media platforms can help universities reach and interact with international students and teachers, as well as promote intercultural cooperation;

- digital tools such as data analytics and machine learning can help universities identify research trends, create research clusters and optimize the research process;

- digital platforms, such as startup incubators and technology transfer offices, can help connect students and teachers with industry partners and investors, creating a more dynamic and innovative entrepreneurial ecosystem;

- digital tools, such as video conferencing and online collaboration platforms, can facilitate international cooperation and create a global network of knowledge and innovation;

- digital resources such as online professional development courses and webinars can help teachers improve their teaching skills and provide a more personalized learning experience for students;

- digital platforms such as alumni portals and social media networks can help universities maintain lifelong relationships with their alumni and provide mentoring and networking opportunities for current students and faculty;

- digital resources, such as diversity and inclusion training modules and online support groups, can help universities create a more inclusive and equitable environment for students, faculty and staff.

Implementation of digitization processes is the most urgent issue today for the strategic development of the educational and research institutions, we previously developed a conceptual model of digitization of the research university [1]. In 2020, the 'SMART TSNUK Digital University' project was initiated and presented, the university administration is still interested in digitalization, the need for digitalization is often the subject of discussions. Approaches to creative modernization of universities were investigated in [2].

Taras Shevchenko National University of Kyiv, held a leadership position in digitization, but subsequently the problem of the balance of the data protection system arose. In 2021, for the first time in 10 years, the university purchased new computer equipment for 10 million hryvnias, including servers that the university needs for further digitization. The process of digitalization is determined in connection with the war in Ukraine, but the university is ready to resume the transformation after the demobilization of the resources needed during the martial law, as digitalization is a very important challenge for the development of the university.

Two main components of digitization of the research university are proposed.

DIR Exchange: the main idea is to create an ecosystem for the implementation of research and development, a platform that will facilitate the exchange of research and development services between scientists and ordinary users. This platform will enable individuals, organizations and businesses to commission and sponsor research and development projects to meet specific needs or interests. Scientists and researchers will be able to initiate research or development, set their own fees and get paid for their work. In addition, the platform can allow researchers to sell the results of their research and development to interested parties, providing a new way to monetize their work. The sharing of research and development will bring a number of benefits to both researchers and users. For researchers, it will offer a new way to fund their work, allowing them to pursue research that may not be supported by traditional funding sources. It will also allow researchers to connect with potential users of their work and provide them with a mechanism to monetize their research results. The platform will provide users with access to a wide range of R&D services, from basic research to product development, that they may not have had access to. The concept of R&D sharing has the potential to create a more dynamic and efficient R&D ecosystem by connecting scientists and users in new and innovative ways. The platform is to facilitate the exchange of research and development services, this platform can facilitate the creation of new products and technologies, promote innovation, and ultimately promote the development of science and technology.

Management Automation for the university involves the use of software tools and systems to optimize administrative processes and increase overall efficiency. This may include automating tasks such as student enrollment, course registration, grading, financial management and research administration. By automating these processes, research universities can reduce the administrative burden on staff, improve data accuracy and security, and free up resources for more strategic initiatives. One of the key benefits of management automation for a university is the ability to track and analyze real-time data, such as student performance information, research results, and financial trends. Armed with this information, the university administration can make informed decisions about resource allocation, program development, and other strategic initiatives. In addition to improving administrative processes, administration automation can also improve the student experience by providing more personalized support and services. For example, automated systems can send students reminders and notifications about upcoming deadlines, offer online counseling and tutoring services, and provide access to digital learning materials and resources. Overall, management automation has the potential to change the way a university operates, allowing it to focus more on its core mission. By leveraging new technologies and tools, the university can become more flexible, agile and innovative, and better equipped to meet the needs of students and faculty in an increasingly competitive academic environment.

Literature:

1. Sitnicki, M. (2018). Development of a Model of Digital Research Universities. *Baltic Journal of Economic Studies*, vol. 4, no. 1, pp. 311–318. DOI: <https://doi.org/10.30525/2256-0742/2018-4-1-311-318>
2. Bugrov, V., Sitnicki, M., Serbin, O. (2021). Strategic management of creative industries: A case study of university information institutions. *Problems and Perspectives in Management*, 19(2), pp. 453–467. DOI: [http://dx.doi.org/10.21511/ppm.19\(2\).2021.36](http://dx.doi.org/10.21511/ppm.19(2).2021.36)