



Digital culture and institutional governance
Information management and security Digital teaching and student experience

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**DIGITAL
TRANSFORMATION**

DIGITAL TRANSFORMATION

Digital transformation is a continuous process of innovation initiatives in which data, technology and people interact, adopting a culture and a new way of doing things. In this context, data is the key to identifying opportunities, prioritizing them and measuring results. Technology, on the other hand, makes it possible to redesign interactions and the user experience. People, on the other hand, are fundamental as organizational and cultural enablers of digital transformation.

For the university, this transformation process is the result of progress in its digital maturity and a response to the need to generate an institutional organization for a series of isolated initiatives that have already begun. In the first phase, the objective is to generate a profound cultural change that will enable the modernization of the institution through digitization. This involves the use of technology to carry out existing processes more efficiently, reducing time and improving results. In a higher stage of this process, the challenge is to concretize the integration of digital technologies in teaching, learning, research, transfer and organizational practices.

BUILDING A DIGITAL CULTURE AT THE UC AND MOVING TOWARDS INSTITUTIONAL DIGITAL TRANSFORMATION

OBJECTIVE / 1 Digital transformation: objectives and actions

- / Generating a government structure that promotes digital transformation with an institutional and comprehensive approach and that promotes a portfolio of technological projects framed within this objective.
- / Implementing a digital competency plan for the entire university community, with special emphasis on its leaders to drive the transformation.
- / Implementing protocols and actions for an ethical use of digital information, as well as for a responsible and self-care based use of social networks and digital technologies in general, in order to develop a culture of healthy digital coexistence or “digital citizenship”.

“Digital development requires a human approach to these processes; technology is not enough. This implies a transformation of our university work that allows us to enrich it and make it more efficient”.

University Superior Council Day



Digital culture and institutional governance

To create a digital culture within the university, we must approach this transformation from an institutional and comprehensive perspective. This implies generating a governance structure that articulates, transversally, the various initiatives in technology and information systems that are carried out in our institution. At the same time, we need to include a new approach in the institutional vision and leadership, enabling all members in digital competencies, improving internal capabilities, and attracting new talent with these skills.

Based on the progress made in this area and the future challenges to be faced, we want to internalize the vision of the university as a laboratory of the future, recognizing itself as a space for experimentation, trial, error and innovation in its management and processes.

“We must use digital tools as a complement to face-to-face activity”.

La UC Dialoga / 2020

“Digital transformation requires a cultural change, it is not enough to have the technologies, but we must change our mentality to integrate them into our work”.

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Information management and security

To move towards a digital university, several actions have been carried out in recent years in the areas of management and information technologies. Recently, the process of implementing a new financial information system began, focusing on change management and coordinated work with academic and administrative units. On the other hand, the Technological Nucleus initiative has improved the alignment of the IT projects of central units with the university's development plan. Our main challenge for the coming years is to improve the security of information, including that related to clinical research that contains patient data.

Another important development in this area is the creation of the Office of Data and Information Governance in 2018, which emerged in response to the growing importance of institutional information as a strategic asset to be protected and enhanced.

“For all the professional work that supports the university, it is also essential to have high-level digital tools”.

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This unit, under the Office of the Provost, has the mission of carrying out UC data governance processes, through coordination between people, processes and technology involved. Among its first achievements are a platform for access to information panels, the design of a data governance methodology and an institutional data map and model. In the coming years, the role of this unit will be essential in the digital transformation process of the university.

The library system, due to its relevance in academic work, is also called to be a key player in this process. In the UC Libraries a large amount of information that is increasingly digital is concentrated, which has led to implement a major transformation in them for several years. Along with continuing to strengthen this work, one of the main challenges of the library system is to be a major partner in the effort to digitally transform the UC.

OBJECTIVE / 2
Digital transformation:
objectives and actions

IMPROVING INFORMATION MANAGEMENT AND SECURITY

- / Fostering greater synergy between the areas that teach and those that generate or administer information, in order to promote better academic and research management.
- / Focusing efforts on improving information security, through the creation and implementation of protocols, policies, compliance with standards, and implementing proper identity management in the IT systems.
- / Developing and implementing a new financial information system (ERP), pioneer in the adoption of technologies focused on change management.



POSITIONING TECHNOLOGY AS A TOOL TO IMPROVE THE QUALITY OF TEACHING AND INCREASING THE SCOPE OF THE EDUCATIONAL PROJECT

- / Updating the UC educational project in the context of digital transformation, and promoting tools and new solutions such as Canvas, Zoom, virtual laboratories, blended classes and technological innovations.
- / Generating a wide variety of teaching methodologies from the traditional to the more technological, studying student preferences and their impact on learning, and supporting the role of the teacher in these new ways of teaching.
- / Incorporating the digital dimension in the formulation of new degree programs and courses, in the programs, in the research areas and in all academic work, together with the development of 100% online undergraduate courses and master's degree programs, with a special focus on international students.

OBJECTIVE / 3
Digital transformation:
objectives and actions

“Digital education has other characteristics and requires new teaching skills”.

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Digital teaching and student experience

Undergraduate and graduate teaching at UC has undergone strong changes in recent times, but particularly during the last year. Until the beginning of 2019, teaching was mainly through face-to-face classes and a Canvas project had been installed, an initiative that in the middle of that year was in full development. From the social unrest of October 2019 and, in particular, due to the covid-19 pandemic of 2020, teaching at the university had to be transformed into a system with 100% remote classes through Canvas and Zoom, a platform that was incorporated to support these efforts. In this new scenario, new and important challenges arose related to academic integrity, digital competencies of professors and staff, internet connectivity and access to computers, among others. However, the first teaching evaluations obtained from this process are very positive, evidencing the quality and commitment of the academics and students that make up the university.

Along with using technology as an important tool to promote higher quality teaching, we must make use of it to improve the experience of students with the different processes and services of the university. The main challenge for the coming years is to rethink our educational project in the context of this digital transformation, and based on these definitions, enhance existing tools and new solutions.

Continuing education has made important advances in processes and technologies that seek to improve the student experience and promote the expansion of this activity. Initiatives such as the modernization of the learning management system platform, the development of massive open online courses, improvements in the pedagogical and course production model, the renovation of physical and digital infrastructure, interactive webinars and online classes through various devices, among others, stand out.

However, there is still great room for further growth, particularly in the area of distance professional education geared to the international world. In this task, the Office of the Vice President for International Affairs plays a fundamental role.

In terms of teaching, and in line with the university's commitment to contribute to the digital transformation of the country, the recent creation of a bachelor's degree in data science engineering is worth mentioning. This new program, which will begin to be taught at the UC in 2021, is the first degree to be housed in an interdisciplinary academic unit -the Institute of Mathematical and Computational Engineering- developed jointly by the School of Engineering and the Faculty of Mathematics.

“The pandemic has driven the digital transformation of teaching. We need to reflect on the role of the teacher and face-to-face teaching”.

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