

# University of Vienna 2028 Development Plan



#### 3.6 Digitalisation

### Opportunities and challenges of digitalisation

Digitalisation permeates all societal, economic, academic and cultural areas. In the narrow sense, it stands for the technical process of converting analogue signals into a digital form. In the broad sense, as understood here, it comprises the diverse and far-reaching changes that are connected with digital innovations and their effects on individuals, organisations and society.

For universities, this includes in particular new tasks and new areas of responsibility, such as exploring and shaping unknown phenomena related to digitalisation and the associated opportunities and challenges. The personal rights of those who work productively and/or receptively with digital instruments need to be observed. Digital innovations also give rise to substantial changes in the way services are provided in research, teaching and administration, as well as new forms of interaction between members of the University and with their environment.

The digital transformation creates opportunities and a new scope of action while also entailing risks and uncertainties. It changes our way of thinking, of conducting research, of teaching, learning and working together. Within this process, the University of Vienna takes an active and shaping role and a critical and reflecting role at the same time. As an institution producing and communicating knowledge, the University is required to raise and act on research questions resulting from digitalisation and to find adequate answers. In this way, it makes a significant contribution to social discourse and to the prudent shaping of current and future digital transformations in education, business, culture and society.

#### **Starting point**

Digitalisation is not new to the University of Vienna; it is found in a variety of projects and initiatives at all organisational units. In research, academics change research questions as well as their research practices and the research methods and infrastructures they use. The topic of digitalisation enjoys high attention in most of the third party-funded research projects acquired by researchers at the University of Vienna, and the University of Vienna is highly valued as a partner in relevant projects. In teaching, the development and use of digital technologies and infrastructures, didactic concepts and organisational solutions have been systematically promoted by teachers and students for many years and have been widened and intensified to a large extent in the wake of the COVID-19 pandemic. Finally, the University of Vienna invests in numerous projects

to improve its administrative processes, to position the evolved structures for the high dynamics of change, and to further develop cooperation in an explorative and incremental way using agile, open and straightforward approaches.

## Quality and diversity as a potential for digitalisation

The University of Vienna has enormous potential for understanding the phenomena associated with digitalisation, which it draws from the quality, diversity, interconnectedness and relevance of its research.

For the University of Vienna, digital transformation also includes the activation of organisational resources and capabilities in order to be able to use digital innovations in such a way that they enrich university activities – also and especially in those areas of responsibility and fields of activity that are growing hand in hand with the digitalisation that can be observed in society as a whole.

The University of Vienna facilitates and promotes the acquisition of digital competences by all university members to jointly reflect on and actively shape the related processes, practices and services, the infrastructure and the University of Vienna's role in the digital ecosystem of education. The University of Vienna prepares its students for tomorrow's digital opportunities and challenges. It relies on its graduates' potential to act as multipliers in academia, the economy, culture and society.

#### Sustainability and impact

The University of Vienna is aware of its crucial role in the higher education sector and other areas of society. It advocates a sustainable digital transformation in terms of a reliable and humane design of digital products and services.

The digital transformation at the University of Vienna also has an effect on society. The society incorporates, realises and uses the digital innovations jointly shaped by the University. Thus, they serve as the basis for developing new digital innovations, new findings and new solutions.

Digital innovations address local, regional and international goals that extend far beyond the topic of digitalisation, from digitalisation initiatives of the City of Vienna or research and technology-related goals of Austria on to research programmes of the European Commission ('missions') to the Sustainable Development Goals of the United Nations.



#### **Strategic aims**

The University of Vienna is committed to shaping a European-style human-centred digitalisation, characterised by respect and responsibility towards all individuals in their diversity and the preservation and development of the cultural heritage. Aware of the special potential of the University due to its diversity and wealth of experience as well as the abundance of its contributions to innovation, this requires continuous critical and constructive reflection on the understanding of and attitude towards digitalisation.

The University of Vienna strives to open up new research areas and to create even more intensive networks at the interfaces between the academic disciplines. Digitalisation correlates with this expansion strategy: On the one hand, digitalisation helps meet the requirements and demands arising from new professorships, tenure track positions and additional measures regarding personnel and infrastructure. It stimulates interdisciplinary and inter-faculty collaboration and the creation and further development of the University's strategic priorities and cross-faculty research specialisations. On the other hand, the numerous appointments in and around the field of digitalisation in turn have a positive effect on the development of subject-related and organisational capacities for the digital transformation at the University of Vienna.

The University of Vienna understands digitalisation as a cross-cutting issue and pursues the goal of an overall digital transformation that is designed actively and coherently. This goal is achieved by connecting and accompanying digitalisation projects, knowledge exchange and joint generation of digitalisation knowledge as well as coordinated efforts to advance digital transformation from a university-wide perspective.

#### Digitalisation advances researchers.

Digitalisation offers new approaches to traditional issues and itself is also the subject of research. In the course of digitalisation, new, universal phenomena and challenges for society are emerging that raise highly relevant research questions in many academic disciplines. To answer these questions and to shape the digital transformation, excellent basic research creates key findings in a plethora of disciplines and often also beyond disciplinary boundaries. These findings allow for

stimuli and the development of solutions through application-oriented and translational research. At the same time, digital technologies are being increasingly used as indispensable instruments in all academic disciplines. Digitalisation leads to a wider range of methods and tools used in research to collect, prepare, analyse, interpret and jointly use data, for example. Subject to availability of funds, the University of Vienna creates relevant structures and framework conditions and provides access to up-to-date and secure digital infrastructures that enable the appropriate archiving and sharing of data as well as meeting the increasing demand for digitally conveyed communication and high-performance computing resources (see chapter 3.1.1: Research).

#### Shaping digitalisation for students and teachers.

The University of Vienna has achieved a strong position as a university offering face-to-face teaching but it is also capable of offering suitable teaching contents in a digital format. Digital technologies do not only allow for innovative teaching concepts but also act as drivers for reshaping face-to-face teaching. Digitalisation opens up new opportunities for action in studying and teaching (see chapter 3.2: Studying and Teaching). Since it plays an important role in all academic disciplines, specific training opportunities from the variety of approaches and findings can also be provided to students in all degree programmes in order to understand, design and use digitalisation and thus be able to support humane digitalisation. Interdisciplinary training opportunities addressing digital competences, such as the technical, legal and ethical aspects of the effects of digital technologies, supplement the portfolio. They are adapted to the students' realm of experiences in different degree programmes and are appropriately linked to the disciplinary competences.

### The University as a partner of the economy, academia, culture and society.

The University of Vienna is involved in the critical discourse about the opportunities and challenges of digitalisation. This discourse promotes extended communication of academically based contributions for the purpose of orientation on questions of social relevance as well as for reflecting on and shaping societal developments. In an instrumental view, digital technologies always enable new forms and formats of knowledge exchange, of technology transfer and of academic communication which promote involvement and participation, critical reflection and proactive shaping of societal development (see chapter 3.4: Impact of the University on Society – Exchange of Knowledge).

### Attractive employer and professional organisation.

The general availability of digital technologies and innovations has changed people's expectations about an organisation over the past years. This concerns, for example, what digital user experience, what digital processes, services and infrastructures and what professional support of all these elements academics expect from their University for research and teaching and students for their studies, what future employers expect from graduates, what employees expect from their employer or what society expects from a professionally organised university. In order to further develop itself as an attractive employer, the University of Vienna is increasingly using digital technologies. It supports university members in fulfilling their tasks by providing suitable systems and infrastructures, creating appropriate organisational framework conditions and offering modern continuing education and training programmes.

The University of Vienna aims to meet the students' expectations for time- and location-independent access to digital resources, digitally conveyed interaction, efficient organisation of the studies and motivating feedback for active, committed and successful studying, and to prepare them for the future opportunities and challenges of digitalisation in the world of academia, the economy, culture and society. Employees are well versed in moving within a flexible, collaborative digital working environment, also thanks to the support received for developing digital competences. They experience recognition for their contributions through an open, also digitally supported feedback culture. They proactively seize the opportunities to improve working practices, processes and services through digital technologies (see chapter 3.5: Employees; and 3.7: Infrastructure).

#### Four overarching fields of action

For the strategic goals of research and career development of early stage researchers (cf. chapter 3.1: Research and Career Development of Early Stage Researchers), studying and teaching (cf. chapter 3.2: Studying and Teaching), knowledge exchange and technology transfer (cf. chapter 3.4: Impact of the University on Society - Exchange of Knowledge) as well as employees, administration and infrastructure (cf. chapters 3.5: Employees; and 3.7: Infrastructure), measures are being initiated and coordinated in close coordination between the business areas. In line with the understanding of digitalisation as a cross-sectional topic, the University of Vienna identifies four fields of action from a university-wide perspective in relation to the digitalisation projects as described in the relevant chapters:

## (i) Promoting digital competences and organisational resilience

The University of Vienna provides training programmes, especially digitally conveyed ones, for the continuous, also self-organised further development of digital competences. The opportunity for all university members to participate in these programmes fosters the development of expertise in order for them to recognise the potential of digital technologies for their own respective sphere of work and help shape the digital transformation. These capacities, together with appropriate framework conditions, ensure organisational resilience in the sense of adaptability and resistance in a rapidly changing world, also through responsible, appropriate and secure use of digital technologies with lasting effect.

#### (ii) Coordinating digital transformation

The University of Vienna enables networks to be established and knowledge to be exchanged about the digital transformation activities conducted in the organisational units (faculties and centres, service units, cross-departmental structures such as research platforms) as a cross-cutting function. It carries out coordinating, moderating and advisory activities to bring together specialist competence and expertise, for example to identify joint needs for implementation projects and to develop coherent solutions from a university-wide perspective. The University also encourages cross-disciplinary and coordinated disciplinary initiatives aimed at digital transformation in organisational units.

### (iii) Supporting the realisation of digital innovations

University members need competent and bundled advice and support for their digitalisation activities and projects in research, teaching, knowledge exchange and administration, from the conception to the results stage. For this purpose, the University of Vienna creates structures and frameworks, provides appropriate support and services as well as access to up-to-date and secure digital tools and infrastructures. This is intended to simplify the implementation of digital innovations on the one hand and to ensure responsible, appropriate and secure use of digital technologies on the other.

### (iv) Improving digital processes and cooperation

Digital technologies are used in such a way that they improve university processes and services and provide all university members with the best-possible support when they are carrying out their tasks. Digital transformation acts as a catalyst for open and collaborative ways of working in research, teaching and administration. The joint development of knowledge, the solution-oriented and prudent collaboration for the implementation of digital innovations, the sharing of experiences and critical reflection on them are intensified both within the University and with cooperation partners.

## Digitalisation based on ambition and prudence

In general, the University of Vienna strives to seize the opportunities offered by digitalisation in all its areas ambitiously and prudently to promote academic excellence, innovative teaching and high-quality and efficient organisation and administration. Using digital innovations should foster its strategic development, strengthen its international competitiveness in research and teaching and help exert wider impact of university actions.