



universität
wien



Digitalisation Strategy of the University of Vienna

Contents

Preamble	3
From Moodle to IT security: The University of Vienna in the digital transformation	4
Digital and data-driven transformations of science and society	7
Impact dimensions, strategic objectives and measures	10
Enablement and efficiency	11
Resilience and care	14
Inter-university cooperation	19
Prospects for users	21
Governance	24
Quality management and human resources development	28
Promotion of digital innovations	28



Preamble

This version 2 of the Digitalisation Strategy for the University of Vienna is based on version 1 of August 2020. This update of the Digitalisation Strategy takes up the positioning and strategic goals specified in the current Development Plan 2031. A dynamically updated portfolio of measures structured according to impact dimensions and fields of action as well as target group-specific expectations of their effects from the user's perspective concretise these goals. A new section on governance clarifies the organisation of decision-making as well as the coordination on digitalisation projects across organisational units.

The University of Vienna's strategic goals specified in the Development Plan provide the framework for the Digitalisation Strategy. Digitalisation is a collaborative strategic initiative, combined with a critical and constructive attitude and an openness to digital innovations. Through these innovations, the University of Vienna continues to develop on a daily basis and the Digitalisation Strategy helps to ensure that these developments are coordinated. Together, successful elements of the digital transformation are identified, thereby improving the exchange of knowledge within and between organisational units. The digital transformation is a key lever for the proactive further development of the University, both now and in the future.

With the updated Digitalisation Strategy, the University of Vienna is also responding to the experience gained and needs identified in the meantime. One example of this is the vision of a university embracing both, the digital and the on-site realm. The aim is to combine the advantages of the digital and physical worlds. From a digitalisation perspective, the aim is to offer students and teachers access to flexible, interactive, hybrid and time-independent teaching and learning opportunities by designing the digital spaces and digital equipment in the physical spaces accordingly. Reliable, easily available and accessible digital resources and tools support independent and cooperative teaching and learning.

Digitalisation affects us all. We consider the implementation of the Digitalisation Strategy to be successful when all groups of university members and people close to the University experience noticeable improvements in their

experience of the University's digital services.

The digital transformation is a key lever for the proactive further development of the University, both now and in the future.



From Moodle to IT security: The University of Vienna in the digital transformation



Digitalisation comprises the diverse and far-reaching changes that are connected with digital innovations and their effects on individuals, organisations and society. The tasks of academic research are to deepen the understanding of these developments, to investigate opportunities and challenges and to contribute to innovative solutions. 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, sharing and working together.

Digitalisation is in full swing and its momentum has increased further. Within this process, the University of Vienna takes an active and shaping role and a critical and reflecting role at the same time. Due to the quality, diversity, networking and relevance of its research, it has enormous potential to contribute to an understanding of and to help shape the phenomena associated with digitalisation. We are observing significant changes both in society as a whole and within the University, which are having a decisive impact both on the University's range of service offerings and their provision of services in research, teaching, knowledge exchange and administration.

Externally, we have observed how digitalisation has played a key role in coping with the COVID-19 pandemic. In this context, the pace of digital technology development has increased significantly and expectations for the rapid availability and implementation of new technologies have also risen sharply for institutions, such as the University of Vienna. At the same time, however, IT security risks have also increased, not least due to changing geopolitical conditions. We are also noticing a widening gap between the increasing demand for digital competences and experts and the available supply on the labour market.

Within the University, we are significantly increasing our capacity, for example in infrastructure, services, personnel and networking between organisational units, and are in the midst of a profound cultural change. Collaborative work, also independent of time and place, with the help of digital tools has become much more important in our institution and is now a natural part of an open and cooperative working style. At the same time, however, we have also noticed that social interaction and informal cooperation have suffered as a result of the need for social distancing due to the pandemic.

In terms of our range of service offerings, we have substantially expanded our digital services, particularly for studying and teaching. These include the establishment of Moodle as a central learning management system and the expansion of the range of e-resources in the University Library. The open and sustainable handling of research data is increasingly supported by the expansion of digital infrastructures and services, for example, through the research data management and data stewardship programme. The focus is also on the balance between the promotion of open science associated with these programmes and spin-off activities to turn ideas and know-how into ventures, e.g. in the Digital Entrepreneurship Innovation Lab. Finally, digital technologies play a major role in expanding the communication of our services, e.g. through the digital magazine Rudolphina or our activities on social media.



The way in which we provide our services has changed significantly as well: In recent years in particular, we have introduced numerous new digital services and provided systems and platforms. In addition to the ongoing consolidation of existing services, further processes and practices in research, teaching, knowledge exchange and administration are being digitalised on this basis. In addition, the University of Vienna invests in numerous projects to improve its administrative processes, to position its structures for the high dynamics of change, and to further develop cooperation using agile, open and straightforward approaches. The deployment of digital technologies is also being greatly expanded on site, although we are still a long way from a university-wide supply of state-of-the-art audio/video technology. In addition, we are concentrating on enabling significantly more flexibility in studying and working from any location without jeopardising the advantages of on-site collaboration, thus increasing the attractiveness of studying and working, for example, through working from home, online and hybrid meetings.

In summary, we can say that both the status and the dynamics of global digitalisation have led to substantial changes in our range of services and the way in which they are provided. The benefits of digitalisation are now crucial for excellent research and teaching, deeply embedded in our daily work as well as in the everyday lives of students and essential for the University's resilience to crises. In order to consolidate these successes and help shape the dynamics of digitalisation in a proactive and critically reflected manner, we must continue to strategically develop our services. This requires increasing investment in our infrastructure and services, the development of competences and IT security, as well as sustainable staffing. Therefore, the University needs additional resources to ensure that university members have unrestricted and secure access to state-of-the-art digital services and infrastructures.

The benefits of digitalisation are now crucial for excellent research and teaching, deeply embedded in our daily work as well as in the everyday lives of students and essential for the University's resilience to crises.





Digital and data-driven transformations of science and society

The University of Vienna is aware of the major global challenges facing society and its special responsibility for the future. Thanks to the excellence of its research and the breadth of its range of disciplines, it is ideally positioned to contribute to overcoming these challenges. The University has defined six strategic priorities in order to further develop the specific qualities of the University of Vienna, to promote cross-faculty and interdisciplinary cooperation and joint, collaborative work on the major issues of the future and to communicate these even more strongly to society. From the perspective of digitalisation, the strategic priority Digital and Data-Driven Transformations of Science and Society is of central importance.

Digital and data-driven technologies are fundamentally and rapidly changing the world, influencing the way people inform themselves, form opinions and generate knowledge, how they make decisions and interact. At the University of Vienna, the development of new technologies, for example in the fields of machine learning and artificial intelligence, goes hand in hand with systematic research into their impact on individuals and society. Questions of digitalisation can only be answered in an interdisciplinary way and technological innovations must be placed in the context of ethical, social and legal framework discourses.



Building on its unique breadth of disciplines and the research expertise built up in cross-faculty fields of strengths, the University of Vienna is helping to shape the key technologies of the future in a sustainable and humane way.

In addition, the strategic priority Digital and Data-Driven Transformations of Science and Society provides findings and methods that can be used in the other five strategic priorities culture, education, democracy; climate, environment, sustainability; physical, mental and social dimensions of health; systems of life; quantum systems and materials for the future.

Cross-faculty, interdisciplinary collaboration is currently supported by the research network Data Science and the research platforms Governance of Digital Practices as well as Mediatised Lifeworlds – Young People’s Narrative Constructions, Connections and Appropriations.

The University of Vienna is significantly contributing to the Cluster of Excellence Knowledge in Crisis (lead: CEU) funded by the Austrian Science Fund. Moreover, it also cooperates with Austrian partner institutions as part of the Vienna Scientific Cluster (VSC), the High Performance Computing Cluster – EuroCC Austria and numerous digitalisation projects. In this context, the University participates in international initiatives, such as European High Performance Computing (EuroHPC), Centre Européen de Calcul Atomique et Moléculaire (CECAM) and the European Open Science Cloud (EOSC).

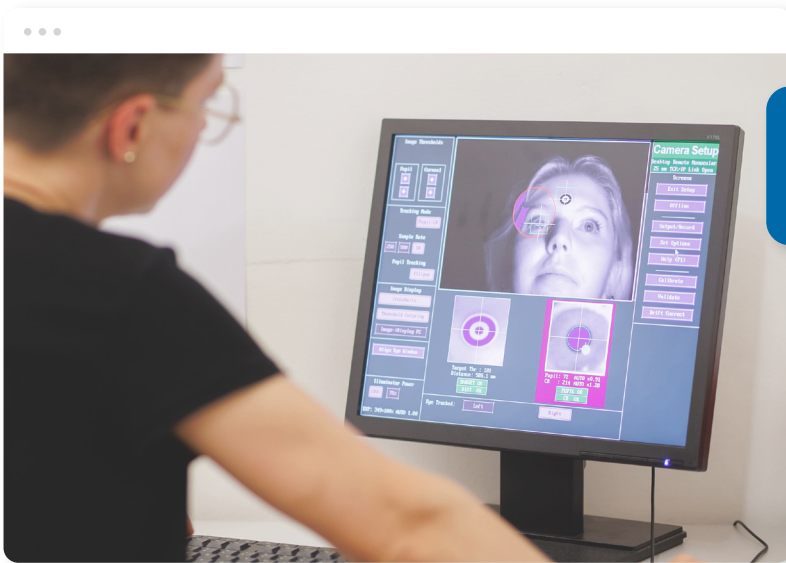
In view of the current societal challenges arising from the rapid development of artificial intelligence (AI), the University of Vienna is planning to expand and deepen its competences in this area. To this end, professorships related to artificial intelligence and its societal impact are to be advertised in various departments, subject to additional budget (see objective “Integrating artificial intelligence with care”).

The topics of this strategic priority also relate to the content and objectives of important national, European and international programmes. This includes, for example, the Strategy for Research, Technology and Innovation of the Austrian Federal Government (RTI Strategy 2030) in the areas of quantum research, high-performance computing and artificial intelligence or the European initiative called A Europe fit for the Digital Age.

In terms of the strategic priority, the Digital Entrepreneurship Innovation Lab aims to bring together innovators from all disciplines to promote entrepreneurship and strengthen the transfer of intellectual property created at the University by its researchers through spin-off companies and non-profit organisations. In this interdisciplinary programme, participants interested in founding a company work in teams to develop their entrepreneurial ideas or solutions for societal challenges related to digitalisation. After a training phase with experts from academia and business, the teams with the most promising ideas are supported by the University on their way to founding a spin-off.

In order to increase their chances of success, promising start-up projects have the opportunity to receive support from the University of Vienna in the initial phase as part of a pre-seed programme. Depending on the individual case, this support can consist of, for example, further training, mentoring by internal and external experts, market analyses, legal and IP advice, or networking with relevant stakeholders or funding programmes for the development of prototypes.

As part of its entrepreneurship activities, the University of Vienna cooperates with various partner institutions and incubators, in particular INiTS, in order to provide the best possible support and advice to founders. In this way, the University of Vienna makes a direct contribution to Austria's innovative strength and competitiveness as a business location.



Impact dimensions, strategic objectives and measures



In general, the University of Vienna strives to seize the opportunities offered by digitalisation in all its areas ambitiously and prudently to promote its strategic development, increase its international competitiveness, promote high-quality and efficient organisation and administration and increase the reach of academic research. Digitalisation affects everything from the research question to the research methods used, the design of studies and teaching to spin-offs and the reflection on opportunities and risks of digitalisation in the exchange of knowledge with society.

Measures are jointly initiated and implemented in close coordination between the divisions for the strategic goals of research, internationalisation and career development, studying and teaching, knowledge exchange and technology transfer as well as employees, infrastructure and sustainability. In line with the understanding of digitalisation as a cross-cutting issue, all organisational units are working collaboratively to drive forward the fields of action defined by the University of Vienna from a university-wide perspective according to the four impact dimensions of “enabling”, “efficiency”, “resilience” and “care”.

In collaboration with stakeholder groups at the University of Vienna, a “portfolio of measures to implement the Digitalisation Strategy” was developed, which presents the planned, ongoing and completed digitalisation projects structured according to these impact dimensions. This portfolio enables goal-oriented coordination between the projects in fields of action and programmes. It is maintained by the project participants as a living document in the internal university wiki.

Enablement and efficiency

In the dimensions of “enablement and efficiency”, digitalisation opens up new perspectives and potentials that would hardly be achievable without it and at the same time increases the efficiency of administrative processes. These dimensions go hand in hand, complement and reinforce each other, drive the increase in quality and excellence and open up new strategic perspectives. Examples of this include the further development of onboarding and further training for employees to increase their competences in implementing digital innovations, the further expansion of services and infrastructures to improve the quality, transparency and reuse of research data, processes and results, and the digitalisation of other administrative processes and services.

University members should have access to the latest digital technologies and be able to use them productively and contribute to their further development.

Developing (digital) competences through onboarding and professional development

The digital transformation at the University of Vienna essentially involves the further development of systemic resources and skills. These organisational capacities serve to open up the constantly expanding technological possibilities for the University in order to design, develop, operate and use meaningful digital innovations for all areas of the University. Capacities are also required to coordinate the user-centred (further) development of new and existing digital services and systems in order to have a coherent impact on university operations.

To this end, the University of Vienna provides, in particular digitally-mediated, offers for the continuous, also self-organised further development of (digital) competences, which are consolidated, supplemented as required and structured for specific target groups. The aim is to establish centrally coordinated processes and a platform that also enables data-based decisions for the high-quality design of continuing education programmes. This pooling of processes also addresses the convergence of the continuing education needs of researchers, teachers and employees in professional administration. At the same time, onboarding services for employees and students should be more closely interlinked and also communicated digitally. This applies to areas such as recruitment and admission to degree programmes as well as to the creation of comprehensible and secure access to university services and systems.

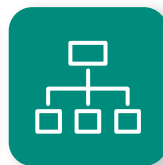
Improving the quality, transparency and reuse of research data, processes and results

Digitalisation makes research more dynamic, productive and effective. The University of Vienna is actively committed to open science with the aim of increasing the quality of research, improving the exchange of knowledge within academia and with society and strengthening trust in academic research. To this end, modern and secure digital infrastructures are available to support data collection, processing, analysis, interpretation and dissemination as well as access to cross-university, European and international digital research infrastructures. This includes repositories for research data, computing capacities for data analyses and simulations as well as the network infrastructure to be able to transfer data between data-generating, analysing and archiving systems.

In order to be able to use modern digital research infrastructures successfully, university members can make use of training and counselling offers ranging from the conception of a research project to the archiving of results. Moreover, the dynamic development of digital solutions that are relevant for researchers requires close cooperation between academics and technical experts. Investments in personnel, organisational and technical infrastructures are key pillars in this context. One focus is the expansion of research data management and the data stewardship programme, for example through a legal help desk that supports researchers with legal issues relating to the handling of data.

Accessing, preserving and presenting digital knowledge

In addition to promoting open science and digital technologies to expand research opportunities, it is also crucial to strengthen trust in the University. This includes, in particular, the University Library as a central institution for cataloguing, preserving and presenting knowledge. For example, we recognise the need to develop strategies and infrastructures for the long-term archiving of web applications in order to ensure their future functionality. The University thus contributes to the creation of an institutional digital memory and to the preservation of the wealth of knowledge maintained and constantly expanded by university members in the digital age.



Modernising digital and physical teaching and learning spaces

The University of Vienna is positioning itself as a university embracing digital and on-site realm. Specific offers and interdisciplinary content on digital competences enable students to better understand and actively shape digitalisation. The University responds to students' expectations for access to digital resources and interaction independent of time and place and prepares them for the opportunities and challenges of digitalisation. To this end, the use of Moodle as a central learning management system together with its integrated didactic functionalities and interaction systems will be further intensified and u:stream will be expanded as a video platform. We are focussing on the integration of open educational resources (OER) and the use of Massive Open Online Courses (MOOCs) in order to expand our range of courses and promote free access to knowledge.

At the same time, the University is prioritising the further development of its physical infrastructure, with the integration of digital technologies playing a central role. The aim is to create multifunctional spaces that both fulfil digital requirements and offer space for interaction and collaboration on site. Well-coordinated space management and the expansion of room booking options are the necessary prerequisites for this.

Digitalising and further developing administrative processes and services

The University of Vienna recognises the fundamental change in expectations towards organisations due to the increasing availability of digital innovations. It strives to fulfil these expectations in terms of user experience, processes, services and infrastructure for research, teaching and studies. In addition, it takes into account the expectations of employers towards graduates, of employees towards their workplace and of cooperation partners and society as a whole towards a professionally organised university. The University uses digital technologies to increase its attractiveness as an employer and to support university members in the fulfilment of their tasks through suitable systems, infrastructures and training opportunities.

The aim is to increase efficiency by further digitalising administrative processes and further developing processes that have already been digitalised, for example in controlling, finance, human resources, studies and teaching. This often requires costly and personnel-intensive measures as well as support, including communication, for the associated organisational change processes. On this basis, services are created that can be used by employees (employee self-services) and managers (manager self-services) and at the same time provide the information basis for well-founded decisions.

The aim is to create multifunctional spaces that both fulfil digital requirements and offer space for interaction and collaboration on site.

Resilience and care

Digitalisation creates opportunities and expands our scope for action, but also harbours risks and uncertainties. The impact dimensions of “resilience and care” require a coordinated, responsible, appropriate, inclusive and secure approach to digital technologies and also include activities to ensure information security, data protection and digital sovereignty. Resilience means being able to remain secure, flexible and robust despite changing challenges. Measures for resilience and care enable us to utilise the opportunities offered by digital innovations competently and at the same time face risks and uncertainties with appropriate composure.

Intensifying collaboration within the University

The digital transformation promotes open and collaborative working methods, the exchange of experience and the intensification of cooperation with partners. The University of Vienna strives to strengthen collaboration within and between organisational units digitally, hybrid and on site by creating spaces and opportunities that stimulate productive exchange between different groups of university members. With formats that promote a broad discourse, the exchange of knowledge and the development of ideas, the University also aims to identify university-wide needs, test technological innovations and develop and critically reflect upon digital solutions. Examples include regular digital events, such as the Digitalisation Resonance Board or the IT4Science Forum. In order to support collaboration within the University, digital exchange options are already in use, for example in Moodle, on the intranet and on the u:wiki, which are constantly being further developed.

At the same time, the University of Vienna promotes the most comprehensive and coordinated digital transformation possible by coordinating and supporting digitalisation projects and cross-departmental initiatives, knowledge exchange and knowledge development at as many levels of the University as possible. It networks the activities of the faculties, centres and service units for digital transformation and promotes cooperation between academia and administration. The aim is open and trusting collaboration between stakeholders with diverse perspectives and complementary competences. In conjunction with suitable framework conditions, this ensures organisational resilience in a rapidly changing world and the responsible and secure use of digital technologies.

Integrating artificial intelligence with care

The University of Vienna is committed to integrating artificial intelligence (AI) with care in research, teaching and administration. Thanks to its in-depth academic expertise, its disciplinary diversity and the interdisciplinary approaches reinforced in its cross-disciplinary structures, the University is convinced that it is ideally positioned to pose new research questions and play a key role in technological development, such as the interweaving of AI and quantum technologies. At the same time, it can understand and help shape both the individual and social effects on people as well as the systemic effects on academia, the economy, society and the environment (see also strategic priority “Digital and data-driven transformations of science and society”). In doing so, we take into account both the dynamics of AI developments, for example through experimental approaches in research, teaching, entrepreneurship and administration, as well as the need to carefully assess opportunities and challenges, for example by contributing academic expertise to the discourse of society. In addition to the specialist disciplines that are driving the development of the mathematical, statistical and computer science foundations, the University aims to further expand research on and with AI methods and applications, particularly in its strategic priorities. Special attention will also be paid to the development of didactic approaches for the education of future generations in schools and universities that take into account the special requirements, opportunities and risks of different disciplines.

The University of Vienna is committed to integrating artificial intelligence (AI) with care in research, teaching and administration.





The University of Vienna recognises the enormous potential that AI offers for the advancement of academic research and the development of new fields of research. We are observing a number of trends that are changing both our research practices and the way we deal with research results and their communication and impact on culture, business and society. In mathematics, computer science and data science, intensive research is being conducted into AI and machine learning models that have almost universal application – even in traditionally non-technical disciplines. At the same time, ethical and legal issues relating to the use of AI are being researched at the University of Vienna and the results are shared with the public. Data protection and intellectual property issues in research must be carefully scrutinised. Used in a meaningful way, AI can accelerate academic progress for the benefit of humanity and the environment by complementing and expanding the skills of academics not only in analysing data, but in all aspects of academic activities, from stimulating creativity to communicating results. In order to keep pace with the dynamics of technological development and its effects, considerable investment in personnel and infrastructure is required. We thus provide university members with access to appropriate services and infrastructures – both within the University and as part of cross-university collaboration – and utilise national and international alliances, for example in the field of high-performance computing. We also support them by providing cloud-based AI services, such as Microsoft Azure Cognitive Services, Azure Machine Learning and Azure OpenAI Service.

In the area of teaching, AI no longer only plays a decisive role in subject-specific study programmes, but across the board in both the current and future development of the University of Vienna. AI tools can be used in many aspects of teaching, which can be summarised in three main areas. Teachers are encouraged to use the latest technologies and tools to ensure research-led teaching at the cutting edge and to adequately prepare students for the labour market. A conscious and reflective use of AI tools can support students in achieving their learning objectives, developing competences in using these tools and gaining a realistic understanding of the capabilities, opportunities and risks of these tools in order to complete their tasks with quality and efficiency. It is important to find and dynamically develop solutions for an ethically reflected and legally secure use of AI tools and to restrict potential misuse, without unnecessarily restricting the experimental scope for students and teachers.

In the area of administration of the University of Vienna, AI also expands the possibilities for the digitalisation of administrative processes, which can lead to a reduction in processing times and in the workload of employees, creating space for new and improved services. In addition to technology monitoring, the identification of possible applications and pilot projects within and between organisational units, the organisational, legal and technical framework conditions for the operation of AI-based systems must be clarified and communicated transparently. Employees should be given the opportunity to familiarise themselves with the new technologies and be provided with information, training and opportunities to share experiences for the use of the constantly growing range of AI-based services, including the often cloud-based platforms and systems used by the University.

Promoting digital accessibility

Digital services should be accessible to all, regardless of their physical or cognitive abilities. The University of Vienna is therefore committed to promoting digital accessibility and is taking technical and organisational measures to ensure that all students and employees can use digital services without restriction as far as possible. These measures are being implemented step by step together with the organisational units.

Strengthening IT security

As a leading educational and research institution, the University of Vienna is aware of the importance of a reliable IT infrastructure. Sensitising university members to IT security issues in order to promote a secure digital environment is a priority. This is supported by the development of behaviour being aware of security concerns and the provision of training and information campaigns. In addition, the University relies on modern and robust security technologies to protect its digital infrastructure from potential threats. The further development of the administration of identities and access rights of university members for digital systems improves the user experience and serves to increase the security of our systems.

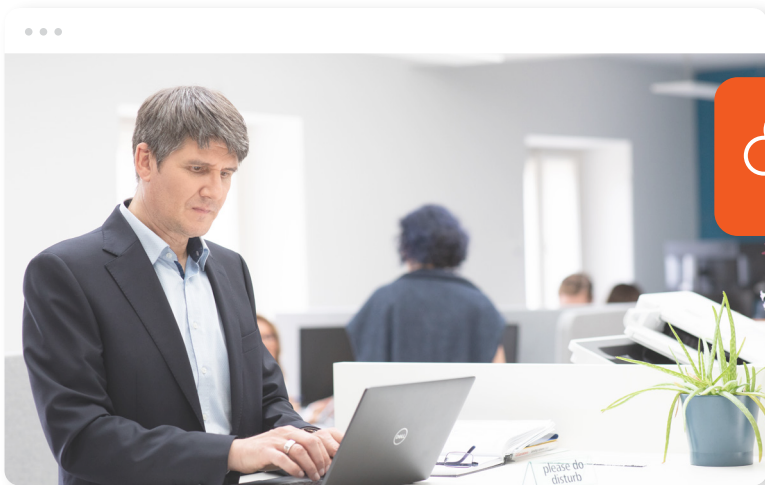
The University's IT security should also be continuously and preventively improved by constantly monitoring the systems in coordination with partners within and outside the Austrian higher education system and adapting them where necessary. With these measures, the University of Vienna ensures that it fulfils its responsibility towards its members and society and provides a secure and reliable digital space for teaching, research and collaboration.

Ensuring digital sovereignty

This is not about self-sufficiency, as universities cannot produce all the necessary hardware and software themselves. Rather, the aim of digital sovereignty is to maintain autonomy as the ability to develop the University of Vienna's services and organisation independently and proactively and to react to changes and threats in its digital environment. The University of Vienna is pursuing a tripod strategy: Firstly, it relies on open source software wherever possible and sensible. Secondly, it makes use of commercial applications and services when specific needs require this. Thirdly, it prioritises developments that emerge from the university system, are tailored to it and promote the autonomy of universities in the design of their digital systems. In addition, the University of Vienna continues to strive to ensure the environmentally-friendly operation of IT systems. This includes resource-saving IT solutions and measures to reduce the environmental impact of digital services.

Using cloud services securely

The University of Vienna aims to use innovative cloud services for research, teaching and administration efficiently and securely. Data in the cloud must be processed in compliance with the GDPR and according to current information security standards. For example, cloud providers need to be evaluated, particularly with regard to their reputation and their services in terms of reliability and availability. In addition, for example, service managers must be appointed, including for data backup, a user management system must be developed and an exit strategy must be prepared. Attention must be paid to the appropriate and economical use of resources. This is achieved through measures in the areas of education, counselling and technology.

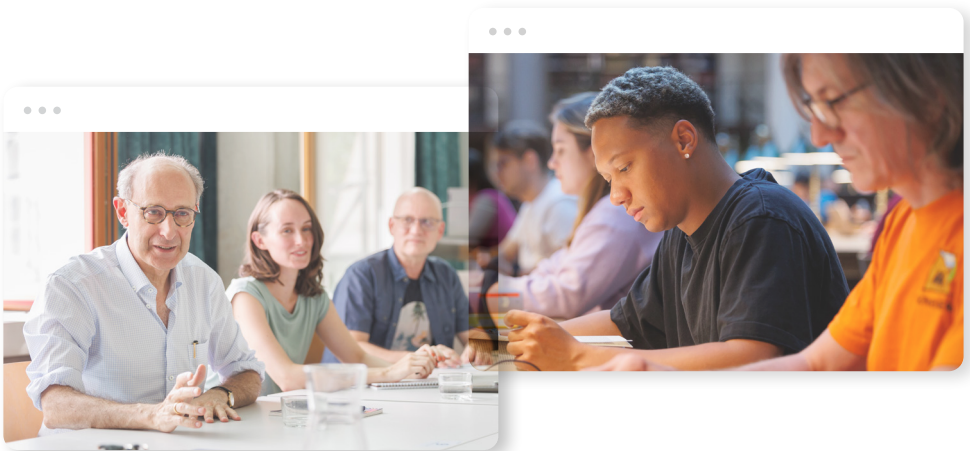


Inter-university cooperation

In the field of digitalisation, lively cooperation between universities has been established in recent years, resulting in the formation of networks that now play an increasingly important role in the development and coordination of Austrian digital (research, teaching and administrative) infrastructures. Many of these infrastructures have also been realised thanks to federal and EU funding, thereby supporting increasingly close collaboration. Examples of this include the Vienna Scientific Cluster (VSC) and the Open Educational Resources (OER) initiatives iMooX and OERhub.

ACOnet, the Austrian academic network, also often plays a key role in this context. The “ACOnet family”, i.e. ACOnet Betriebsorganisation, ACOnet Verein and ACOmarket, connect Austrian research, educational and cultural institutions both technically and socially. ACOnet also acts as an intermediary at European level through various initiatives and organisations, such as Géant, initiatives and services of the European science network.

The University of Vienna plays a key role in these cross-university initiatives and actively shapes new collaboration in research, teaching and administration, such as in the digitalisation projects funded through the calls of the Austrian Federal Ministry of Education, Science and Research. Within the University of Vienna, these diverse collaborations are bundled in various exchange formats, such as the Digitalisation Resonance Board and the all-hands meetings on digitalisation projects, in order to maintain the transfer of knowledge.



Strengthening networking through academic cooperation

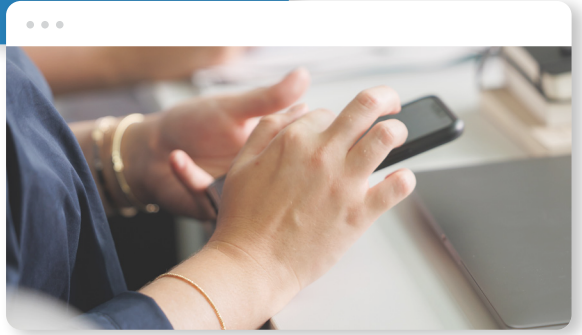
The University of Vienna strengthens its international presence by actively participating in networks and initiatives that support digital higher education. It participates in European networks such as the EuroCC Competence Centre for Supercomputing and the European Open Science Cloud (EOSC) as well as the activities for the digital transformation in the European University Association (EUA) and The Guild in order to develop its strategic objectives and measures in collaboration with partners and thus strengthen European higher education as a whole. In addition, the University of Vienna is part of the Circle U. alliance, an association of research-intensive European universities that promotes mobility and entrepreneurship with a focus on the use of digital technologies, for example, and thus gives students access to international experience. In cooperation with European universities, the University is committed to human-centred digitalisation in the European style and to recognising the special role of universities due to their diversity, wealth of experience and high potential for innovation. Digitalisation is characterised by respect and responsibility towards all people in their diversity and the preservation and development of our cultural heritage. The design of digital offers should therefore follow certain principles, such as openness, participation, sustainability and inclusion.

Developing cross-university digital services and infrastructures

The dynamic digital development of the higher education system requires an increased level of cooperation from universities, both at the national and international level. Digital transformation processes are often driven by platform providers, e.g. through research, learning and exchange platforms. Students and academics create added value as users by sharing data, results and services, thus producing considerable network effects that are marketed by the platform providers. Such developments pose particular challenges to institutions, such as universities, in terms of their positioning vis-à-vis the platforms that are important for students and academics, which they can only tackle together.

Financing the digital transformation of the higher education system will continue to require additional budget with the aim of jointly procuring, developing and operating services and systems wherever possible. In addition to European initiatives, national initiatives for cooperative digital transformation processes should also be strengthened, for example through ACOnet, ACOmarket and an active community of experts, in order to assess future opportunities and challenges and to design and implement further cross-university projects.

Prospects for users



A lot has happened in the field of digital technologies in recent years, and members of the University of Vienna have played and continue to play a key role in shaping their development and use. These developments are reflected, for example, in the growing importance of topics, such as IT security and artificial intelligence. In this dynamically evolving field of tension, our focus is on expanding the skills of university members with user-centred and secure digital services and providing them with the best possible support in fulfilling their tasks. This should fulfil the following target group-specific expectations:

University members

University members are informed about the digital services that the University provides to them, their working groups, project teams and networks to which they contribute. They are able to use these services productively themselves.

Prospective students

Prospective students are well-informed through the use of digitally-mediated offers of the University of Vienna and are competently advised through digital communication with university members. They gain a good understanding of how their degree programme is structured.



Students

The university offers students attractive study conditions through the modernisation of digital and physical teaching and learning spaces. Students can personalise and flexibly design their digital environment and have access to digital resources and opportunities to interact with students and lecturers regardless of time and place – digitally, hybrid and on-site at the University. Their need for an efficient organisation of studies is met. They can access adequate information about their learning progress and receive feedback that helps increase their learning success. They are well prepared for the future opportunities and challenges of digitalisation.

Employees

Employees are adept at working in a flexible, collaborative digital working environment, also thanks to the support they receive in developing digital competences. Their contributions are recognised through a positive, digitally supported feedback culture. They use self-service offers for employees in a competent way and take advantage of further training opportunities, provide feedback and proactively seize opportunities offered by digital innovations to improve working practices, processes and services for them and their colleagues.

Researchers

Research is carried out in collaboration with project teams and networking in the international academic community, also with digital support. The digital research infrastructure and the associated services support researchers in their research and meet the international state of the art, subject to the availability of funds. It also facilitates the successful acquisition and realisation of research projects – from the conception of a research project to the handling of research data and the archiving of results – and increases the visibility and effectiveness of research activities and results.

Teachers

Through the University's digital learning platforms, tools and support measures, teachers are enabled to implement innovative teaching concepts, to enrich their teaching through appropriate and meaningful digital teaching services, to create and use open educational resources and to efficiently organise teaching, exams and feedback processes for students. The modernisation of digital and physical teaching spaces supports them in implementing attractive digital and hybrid teaching formats.

Executive staff

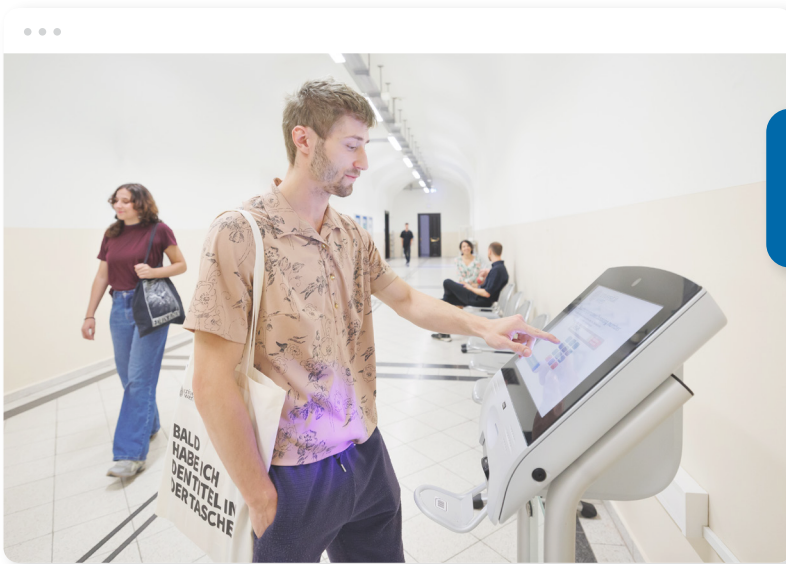
Executives have secure and reliable access to up-to-date, complete and accurate information required for decision-making processes. This information is provided to them in digitally enhanced, productive processes with appropriate control and effective notifications. They use manager self-services in a competent way and take advantage of further education offers, provide feedback and proactively seize opportunities offered by digital innovations to improve working practices, processes and services in their area.

Cooperation partners

Cooperation partners can access the information they need when working with employees of the University, share data easily and securely, jointly develop digital resources and communicate and interact with members of the University of Vienna from any location.

Interested persons

Interested parties are well-informed through the use of digitally-mediated offers of the University of Vienna and gain a good understanding of the University, its activities, results and contributions to society.



Governance



The University of Vienna's governance for digitalisation builds on the established university organisation and the cooperation between the university management, university bodies and organisational units as defined in the Universities Act, Statutes, rules of procedure and the Organisation Plan, among other things. In accordance with the positioning of the topic of digitalisation as a cross-sectional issue, the established organisation is supplemented by structures and processes that regulate the cooperation between the organisational units in digitalisation projects and with regard to the development and operation of joint digital(ised) services. Decisions are made on strategic endeavours across organisational units. These include projects to implement the Digitalisation Strategy as well as projects that are initiated, prepared and introduced in line with the dynamics of the cross-cutting topic by specialist teams across organisational units via the heads of the organisational units involved. In addition, these projects are bundled into fields of action or programmes in accordance with the strategic objectives specified in the Development Plan in order to coordinate, monitor and evaluate their implementation.

The operational implementation of inter-organisational digitalisation projects takes place in cross-sectional structures: One organisational unit (OU) takes the lead and coordinates the development of ideas for projects into project applications in close cooperation with the other organisational units involved. These project applications are submitted to the Rectorate as investment project applications (IP applications) as part of the target agreements after prior consultation with all organisational units involved.



In these cross-sectional structures, we work according to the following principles:

- **Cooperation:** Wherever necessary due to the objective, we tackle projects together.
- **Participation:** We encourage active participation and co-design by members of the University.
- **Openness:** We value transparency and open dialogue.
- **Inclusion:** We strive for accessibility and barrier-free access for all involved.
- **Agility:** We work and develop in iterative processes.
- **Communication:** We emphasise clear and effective information for all those involved.

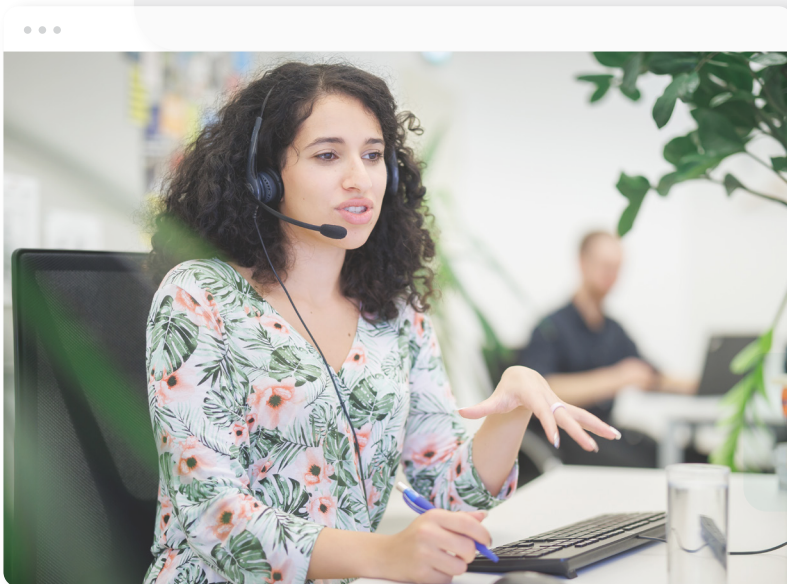
For digitalisation projects, we establish a systematic approach to planning, implementation, execution and evaluation as well as the transfer to regular operations and communication to the university public.

Project application

In close coordination with the organisational units (OUs) involved, a project proposal is jointly formulated that takes at least the following aspects into account:

- **Target orientation:** Expected results (scope); contribution to the goals defined in the Digitalisation Strategy and strategic coordination with the technical portfolio of the Vienna University Computer Center (ZID).
- **Added value:** Benefits through service offers for defined target groups from the user's perspective.
- **Time, cost and risk analysis:** Planned duration; estimation of costs of all organisational units involved; management of risks and fulfilment of legal framework conditions.
- **Prerequisites:** Pre-conditions for the start of the project; organisational and technical conditions for the implementation of the project results.
- **Team structure:** Project management (subject-specific and technical), project participants and clarification of roles.

These applications are prioritised taking into account legal requirements as well as the strategic objectives and performance criteria of the University defined in the Development Plan and performance agreement. Projects are visualised in the portfolio of measures.



After project approval

After project approval, certain key activities and responsibilities must be taken into account:

- **Project management:** Realisation under the subject-specific management of the lead OU and technical management of the ZID.
- **Stakeholder management:** Organisation of participation and effective communication with stakeholders.
- **Monitoring:** Continuous monitoring, reporting and iterative adaptation of the project.
- **Coordination:** Continuous exchange between projects along fields of action or programmes.
- **Transfer to operations:** Long-term financial and resource planning; planning of organisational embedding; process and service improvement after the end of the project.
- **Final evaluation:** Evaluation and documentation of the knowledge gained (lessons learned).





Quality management and human resources development

To ensure the quality of a project and the competences required for it, Human Resources Development offers appropriate training measures for roles in projects and service operations, such as project managers and service managers. These measures establish the University of Vienna's project management methodology for digitalisation projects as a basis. In addition, a community is being developed to promote the exchange of expertise and best practices in digitalisation.

Promotion of digital innovations

In order to promote innovation and speed, preliminary projects, smaller initiatives on the topic of digitalisation and experimental approaches are made possible. In contrast to regular investment projects, which are usually submitted as part of the annual target agreements, calls for innovation projects can also take place during the year. Submission and prioritisation with the help of a jury are carried out by the Digital Transformation Coordination Unit, which prepares the decision for the Rectorate. Despite these special features, innovation projects also undergo the project cycle described above.

The structures and processes for the governance of inter-organisational digitalisation projects aim to ensure that the objectives set out in the Digitalisation Strategy of the University of Vienna are effectively translated into projects, successfully implemented and further developed in a coordinated manner in overarching fields of action.



Imprint

University of Vienna
Vice-Rectorate for Digitalisation
and Knowledge Transfer
Universitätsring 1
1010 Vienna
digital.rektorat@univie.ac.at

Visual Design

Corporate Communications

Translation

Corporate Communications

Photo Credits

derknopfdrucker.com,
Barbara Mair, Sebastian Philipp.

Vienna, January 2024.