

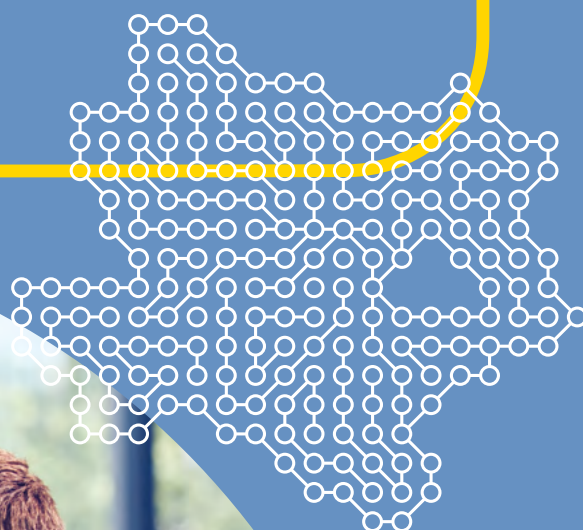


Use the digital transformation.
For country and people.

digi report

The Lower Austria Digitalization Report

Current projects
and review of 2023



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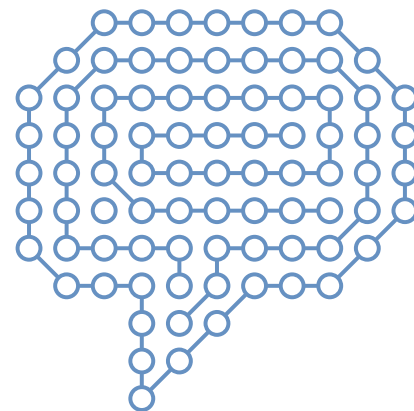
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Preface



We are focusing on artificial intelligence

For years, our digitalization campaign has focused on new technologies and digital solutions, ensuring business, science and public administration can exploit the advantages they offer. Artificial intelligence (AI) has long been recognised as a key technology of the future. In 2023, we have all come to see and better understand the options that AI offers us in the form of content generation tools. Now our task is to use these opportunities and this public acceptance to best effect. That's why we have been quick to launch several AI initiatives in a variety of areas, allowing us to further expand our digital lead. Find out more in the digi report where we present more than 30 different digitalization projects from Lower Austria.

Johanna Mikl-Leitner
Governor of Lower Austria

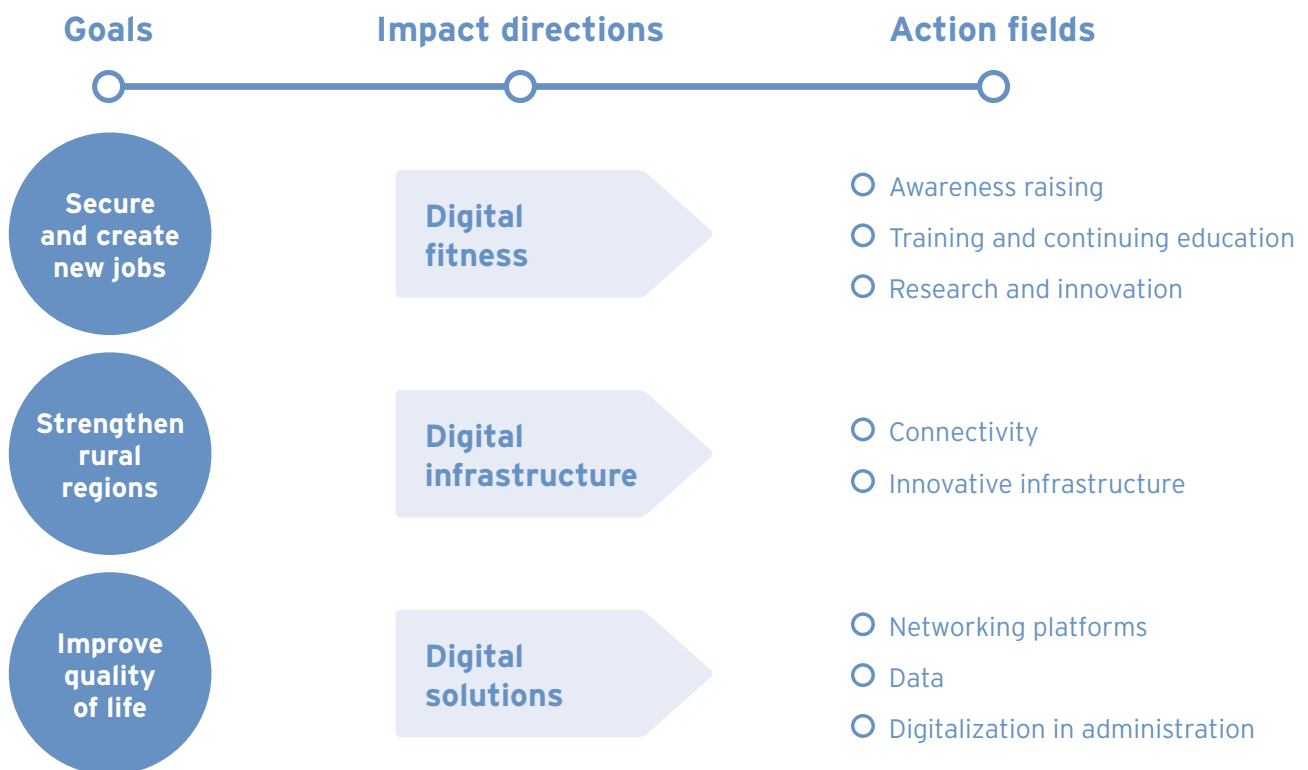
1.

The Digitalization Strategy For Lower Austria

“Use the digital transformation. For country and people.”

Lower Austria’s diverse economic, structural, and geographic characteristics were all taken into consideration in drawing up the Digitalization Strategy for Lower Austria. The basic goals of the strategy are to secure and create new jobs, to strengthen rural areas, and to improve the quality of life for everyone in the region. The digitalization strategy is designed to create digital opportunities for both individuals and businesses.

To achieve these digitalization goals, it is important to make the population, businesses and the public sector fit for the future, and to develop the infrastructure needed to exploit and promote digital innovations and solutions throughout Lower Austria. To this end, eight different fields of action have been developed within the three impact directions “Digital fitness”, “Digital infrastructure”, and “Digital solutions”.



In the eight action fields, digitalization projects are developed and implemented, events organised, lectures held, and prizes awarded, to achieve the defined goals.



The *digi report* documents the implementation of the Digitalization Strategy for Lower Austria based on performance indicators and best practice examples.

The **Digital Economy and Society Index (DESI)** summarises Europe's digital performance indicators and follows the advances made by the EU member states. Since 2023, there has also been a DESI for Austria's federal states. This allows digital progress to be measured both at European level and between Austria's states.



The Technology and Digitalization Unit, part of the Department of Economy, Tourism and Technology, was established in 2017.

The Unit's key tasks include:

- Supporting the implementation of the Digitalization Strategy for Lower Austria
- Regular internal administrative coordination with the Office of the Lower Austrian Provincial Government, the Division Heads, and the representatives of the political district authorities
- Networking and coordinating diverse digitalization initiatives in Lower Austria
- Mobilising colleagues and various stakeholders with respect to specialist issues of future significance
- Initiating work groups on various digitalization issues across organisations and internally

Find out more about the Technology and Digitalization Unit at land-noe.at/team-digitalisierung.



The digitalization campaign is being supported by external experts including the House of Digitalization programme advisory board, and through cooperation with the University for Continuing Education Krems.

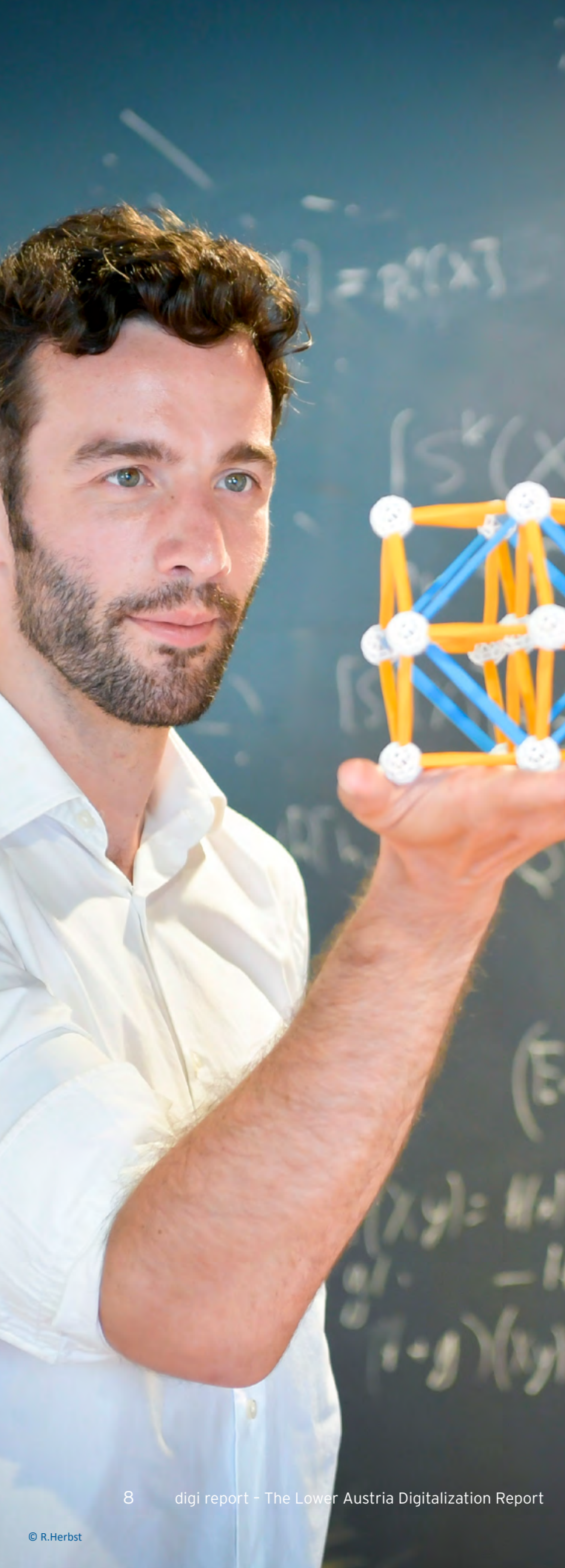
The Department of Economy in the Provincial Government of Lower Austria is involved in several EU projects to **drive networking and exchange** at EU level. The results of these projects are also used to support the digitalization process.

Digital tourism tax: Co-creation as part of the inGOV research project

One of 4 pilot projects making up the EU-H2020 project is developing a digital tourism tax for Lower Austria. A prototype digital solution is being developed through co-creation with a variety of stakeholders with the aim of minimising the manual steps, simplifying processes, and reducing errors. The joint cooperation, development and learning processes cross both organisational and regional boundaries.



© inGov



2. Annual focus for strategy implementation in 2023: Digital solutions

Every year, the Digitalization Strategy for Lower Austria selects a particularly topical thematic focus which is relevant to the interests of the province. In 2023, this topic was “Digital solutions”, with a focus on artificial intelligence.

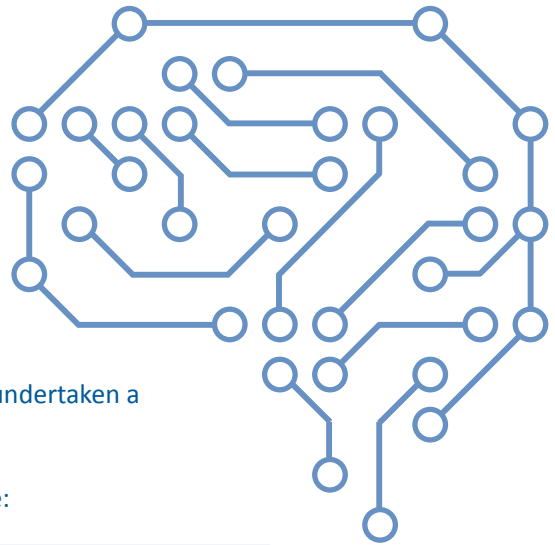
Digital solutions help to improve and simplify processes and communication. They allow businesses, in particular SMEs and start-ups, to develop new, customer-focused products and services, and enhance their efficiency and productivity to establish a competitive advantage. The Lower Austrian Provincial Government is also applying digital solutions to create a user-friendly and service-oriented administration. Digital solutions play an important role in improving and simplifying processes and communication.

○ Impact direction

**Digital
solutions**

○ Action fields

- Networking platforms
- Data
- Digitalization in administration



Over the years, the Lower Austrian Provincial Government has undertaken a variety of activities to rapidly advance this annual focus.

The following projects focus on the topic of artificial intelligence:

digiNet goes Campus for all Lower Austrian Provincial Government digitalization officers

see page 11

The province's Digitalization Forum with a focus on AI

see page 12 and 13

"Digital Assistants - Feasibility Study for AI-Supported Expert Opinions" - a winning project in digi-contest 2.0

see page 15

Technology workshops on the topics of artificial intelligence and digital ethics

see page 16

Anonymisation of documents in the Lower Austrian Provincial

see page 17

Online application processing with the support of cloud services and artificial intelligence

see page 17

Getting started with ChatGPT

see page 17

Hackathon "AI for Social Good" using administrative data at the FH St. Pölten

see page 21

More about artificial intelligence (AI)





Trend Management Workshop at the Political District Authority of Amstetten

© WST3

Petra Stummer, Head of the IT Department of the Provincial Government of Lower Austria, presenting at the e-Government Conference in Graz.

© gurgpro



Best practice examples from Lower Austria at the 2023 e-Government Conference:

Both trend management and the pilot platform LENIE (see page 20) were presented at the conference.

digiNet - the Lower Austrian Provincial Government's digitalization network

The aim of the workshop series with all eleven groups at the Office of the Lower Austrian Provincial Government together with the 20 political district authorities was to learn about future management, jointly examining current digitalization trends, and formulating a vision for the future with specific actions for each department. The project was

conducted by the Department of Management and Administration, together with the Technology and Digitalization Unit and University for Continuing Education Krems, and ran through to summer 2023.

digiNet – the Lower Austrian Provincial Government's digitalization network

Every department of the Lower Austrian Provincial Government has its own digitalization officer. They are all part of digiNet, and actively shaping and driving digitalization in their own departments. The aim is to make internal work processes simpler, more efficient and more service-oriented – both for Lower Austria's citizens and its provincial employees.

digiNet supports the digitalization officers with regular (online) network meetings, field trips, and digiNet News.

These formats are intended to:

- (Make available (specific) know-how about digitalization
- Provide information about digitalization trends, tools and (external) best practice examples
- To offer the chance to meet and talk

digiNet goes Campus

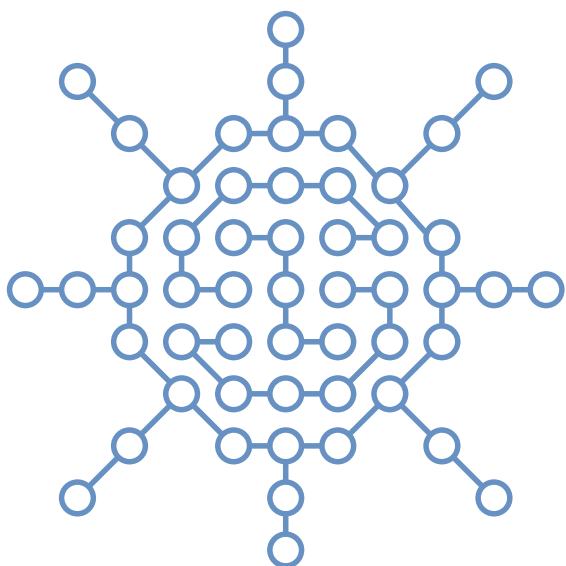
digiNet goes Campus is a special continuing education programme for all Lower Austrian Provincial Government digitalization officers. It serves as a bridge between administration and science. The aim is to gain insights into the latest technologies, applications and research areas in the various work and business areas in order to enhance the digitalization officers' digital skills. Furthermore, it establishes contacts with Lower Austria's universities and universities of applied sciences. The following continuing education programmes were offered:

- Deep Learning und Natural Language Processing – UWK
- AI, VR/AR and Digital Business Development – IMC FH Krems
- The Internet of Things and practical applications of AI – FOTEC/FH Wiener Neustadt
- Technologies and Digital Tools in Practice – Josephinum Research, Wieselburg
- New Forms of Work/AI and Automation/IT Security – FH St. Pölten

The continuing education programme is run by the House of Digitalization network and organised by the Technology and Digitalization Unit.

85 digitalization officers from all departments of the Lower Austrian Provincial Government are part of the digiNet and are actively shaping digitalization.





Digitalization Forum with the digi-contest 2.0 awards

“Digital ideas create the future” was the motto of the Digitalization Forum 2023, held in the House of Digitalization in Tulln for the first time. It was attended by the heads of the administrative offices and the digitalization officers from each department. The participants were treated to a varied and informative programme involving experts from science, administration, and business. Current digitalization topics were discussed in the DIGI WISSEN presentations. The DIGI PRAXIS interactive information trail gave participants the chance to learn about digital best practice examples and digital applications in public administration. The DIGI TALK format allowed participants to sit down and talk with the experts. Following the award for the digi-contest 2.0, the next digital projects are now in the starting blocks – find out more on pages 14 and 15.



Impressions from the Digitalization Forum

Image left: Opening by State Office Director Trock

Image right: Impressive backdrop in the House of
Digitalization

Image below: Carina Zehetmaier, Women in AI,
with her lecture on the "Responsible use of artificial
intelligence in administration"

Image lower right: Networking and exchange

Images: © weinfranz



Image left: The DIGI PRAXIS information trail –
the interactive poster exhibition on best practice
examples and current digitalization topics

Image right: Finalists in the digi-contest 2.0

Images: © weinfranz





From the starting signal to the best digi-contest 2.0 ideas - a review

Image left: Jury meeting in June 2023: Florian Breitler (Regional Building Office III St. Pölten) presents his idea for “Digitalized construction project permits in Lower Austria – we set the course!” to the jury.

Image right (from left to right): The winners: Ulrike Balenovic (Kindergarten Höflein), Florian Breitler (Regional Building Office III, St. Pölten), State Office Director Werner Trock, Doris Schober-Schütt (Department of Economy, Tourism and Technology) and Thomas Mayer (Department of Municipal Matters)

Image lower left: Jury meeting in June 2023: The jury members from left to right: Michael Filz, (Department of Personnel Matters), Deputy State Office Director Gerhard Dafert, Petra Stummer (IT Department of the Lower Austrian Provincial Government), State Office Director Werner Trock, Kerstin Koren (Department of Economy, Tourism and Technology) and Professor Peter Parycek (University for Continuing Education Krems)

Image lower right: Pitching workshops in May 2023: Competition entrant Nikolaus Gyarmati (BH Baden) presents his ideas on “M-EPI integration for tuberculosis care” in a short video.

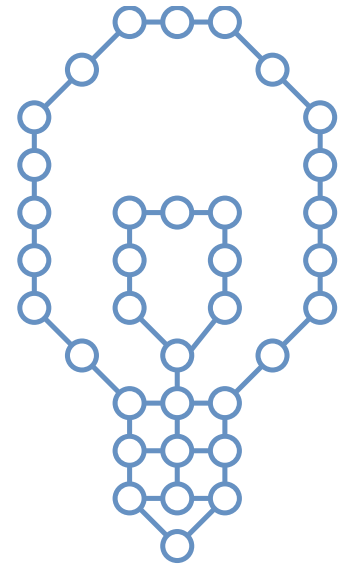
Images: © WST3

Lower Austrian digi-contest 2.0 ideas competition

The digi-contest 2.0 ideas competition was looking for the best ideas to enhance digitalization in the Lower Austrian Provincial administration. They included digital solutions to simplify internal processes and workflows and improved digital services for our citizens and employees. All Lower Austrian Provincial Government employees were allowed to take part in the competition. The best ideas were determined by a jury in 2023, prizes were awarded, and the ideas will now be implemented as a matter of priority.

The winning ideas:

Automated import of data into noeKIGAnet via online portal:
Ulrike Balenovic
(Kindergarten Höflein)



Digital Assistants - Feasibility Study for AI- Supported Expert Opinions

The idea is to use artificial intelligence (AI) to help draft expert opinions. Generative AI acts as a “digital assistant”. As this technology has only recently achieved widespread application, a feasibility study is being carried out to examine current options for its use. This allows us to gain valuable experience and develop recommendations for future action.

e-Exam:
Georg Miernicki (IVW3)
and Thomas Mayer
(IVW3)

Digital Assistants -
Feasibility Study for
AI-Supported Expert
Opinions: Doris Schober-
Schütt (Department of
Economy, Tourism and
Technology)

Digitalized
construction project
permits in Lower
Austria - we set the
course! Florian Breitler
(Regional Building Office
III, St. Pölten)

Thematic work groups with focal topics

Since 2017, thematic work groups have been run with internal and external stakeholders on the topics of economy, agriculture, tourism, sport and culture, the labour market, further education and training, infrastructure, energy, and sustainability. The groups discuss experiences in digitalization and explore the specific focus topics.

In 2023, the Agriculture Working Group visited Josephinum Research in Wieselburg where the Innovation Days were being held. Participants were able to learn about and experience at first hand the latest technological developments in agriculture, including the harvesting robot.

A second working group meeting was held in the House of Digitalization where, in addition to methods such as Lego® Serious Play®, the working group was able to immerse itself in new technologies in the FabLab.

Condensed know-how in technology workshops

The technology workshops offer the opportunity to share know-how on current digitalization issues within the provincial administration. Experts convey the potential offered by new technologies and discuss with the participants their future applications in various areas of Lower Austria. In 2023, technology workshops were offered on the topics of artificial intelligence and digital ethics.

Single Digital Gateway in the Lower Austrian Provincial Administration:

The Single Digital Gateway (SDG) offers EU citizens the opportunity to access information about procedures online, as well as to conduct some administrative processes digitally. The SDG will be implemented by administrative bodies at various levels, including federal, provincial, and local government. The relevant departments of the Office of the Lower Austrian Provincial Government are responsible for implementing the SDG and are receiving support from the Coordination Office for SDGs which has been set up in the Technology and Digitalization Unit.

First Steps to Implementing Artificial Intelligence in Administration

The IT Department of the Lower Austrian Provincial Government is constantly considering how modern technologies such as artificial intelligence can provide support in a range of administrative areas:

Getting Started with ChatGPT

The IT Department of the Lower Austrian Provincial Government provides central access to more than 650 standard software products. Until now, product descriptions have been missing due to the high level of manual input required.

By integrating ChatGPT, the missing information could be automatically generated. This significantly improved the search function in the software centre, and only required 2 hours of programming.

Online application processing with support from cloud services and AI

In 2023, more than 1,000,000 applications were submitted to the Lower Austrian Provincial Government online. The processing of applications is increasingly being supported by new technologies: The cloud service guides applicants to the online form or online advisor in the correct sequence so as not to overload the four supporting servers during peak times. An AI-based tool automatically checks the validity of the ID copy attached to the application to reduce the manual verification effort.

Anonymising documents in the Lower Austrian Provincial Administration

Extensive publication obligations in plant law, waste management law, and commercial law require the offices of the Lower Austrian Provincial Government to make available access to the respective notifications or central data relating to the notifications. The Provincial Administrative Court of Lower Austria publishes anonymised decisions in the Federal Legal Information System (RIS). Due to the volume of documents, three different software products from Denmark, Switzerland and Austria were tested which use AI to anonymise documents while maintaining the semantic connection between potentially anonymised actors.

Once the product has been chosen, its technical commissioning will be prepared.¹

¹ The Department of Plant Law, the Provincial Administrative Court of Lower Austria and the Departments of Management and Administration/Legal Affairs, and the IT Department of the Lower Austrian Provincial Administration were involved in the evaluation

The digi4Wirtschaft programme provides businesses with digital solutions

In continuing the digi4Wirtschaft programme, the Department of Economy, Tourism and Technology at the Lower Austrian Provincial Government and Lower Austrian Economic Chamber are promoting the digitalization of processes in Lower Austria's production companies and manufacturing businesses.

The digi4Wirtschaft programme is divided into three separate offerings:

digi Kickstart

In workshops with 6 to 10 companies, supported by external digitalization experts, digitalization activities for each company are developed and the first small steps for rapid implementation defined and started.

digi Assistant

The Lower Austrian Chamber of Commerce offers companies consultations with certified experts to explore the opportunities offered by digitalization.

digi Investment

Investments for implementing and improving digitalization processes, implemented on the basis of a detailed concept, can be supported with a grant and/or a NÖBEG guarantee to secure financing.

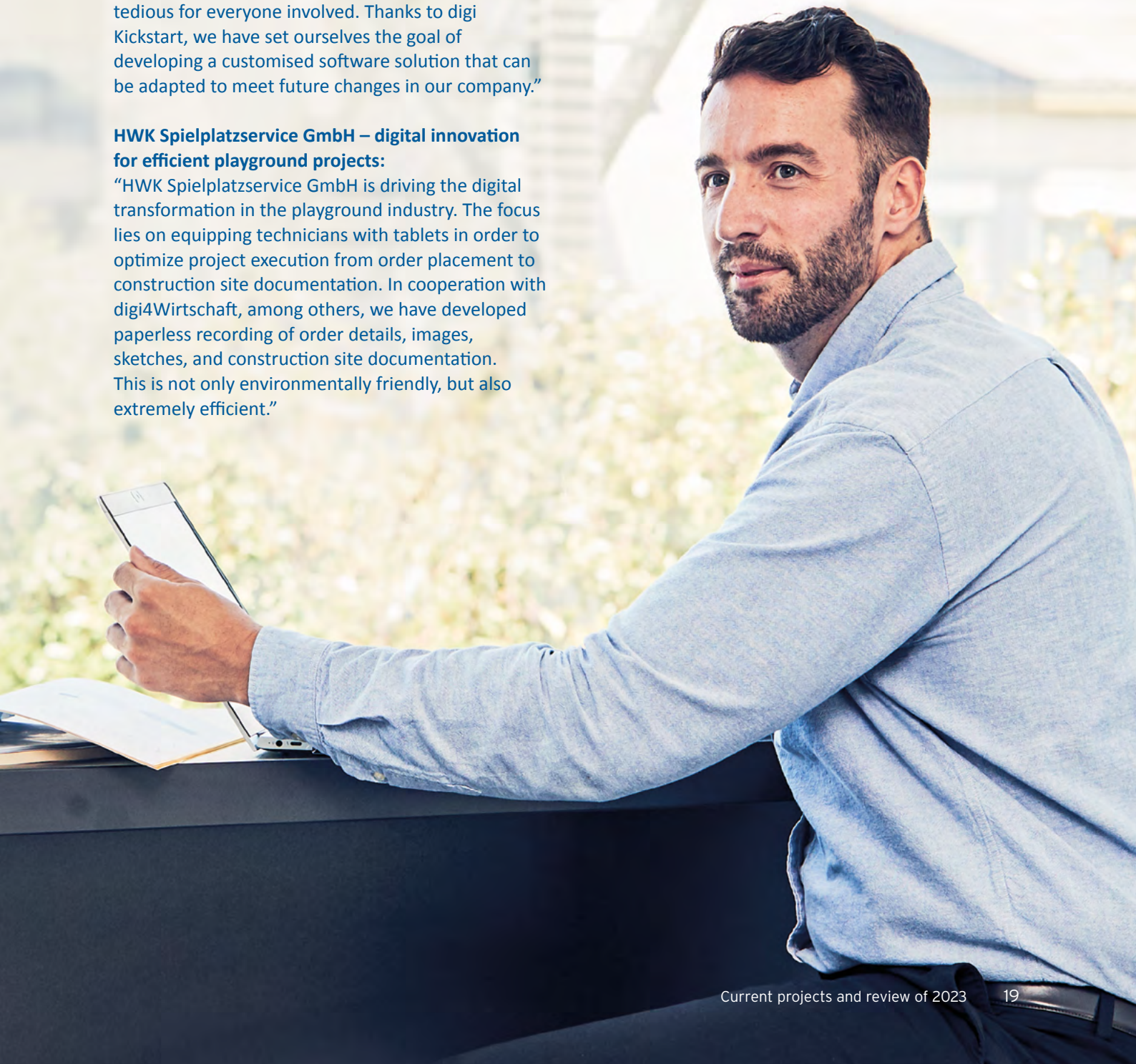
What do companies say about the Kickstart workshops?

EXM Technologies GmbH – finally digital:

“Our old database system could no longer be extended, and we had to fall back on isolated applications and Excel lists. This was inefficient and tedious for everyone involved. Thanks to digi Kickstart, we have set ourselves the goal of developing a customised software solution that can be adapted to meet future changes in our company.”

HWK Spielplatzservice GmbH – digital innovation for efficient playground projects:

“HWK Spielplatzservice GmbH is driving the digital transformation in the playground industry. The focus lies on equipping technicians with tablets in order to optimize project execution from order placement to construction site documentation. In cooperation with digi4Wirtschaft, among others, we have developed paperless recording of order details, images, sketches, and construction site documentation. This is not only environmentally friendly, but also extremely efficient.”



Digital platform LENIE supports active community living

LENIE is an acronym for “living in Lower Austria” and is a free app offering digital support for organising and facilitating joint activities at local level. The idea was developed by citizens during a sandpit process on digital solutions for successful village and community living, and is coordinated by the Technology and Digitalization Unit of the Lower Austrian Provincial Government. The aim of LENIE is to link the local population more closely and involve as many groups of people as possible in village and community activities. The prototype was developed and actively tested over several months in a co-creation process run in five pilot communities – Herrnbaumgarten, Hirschbach, Kirchberg an der Pielach, Maria Enzersdorf and

Waidhofen an der Ybbs. The source code is now available free of charge. gemdat in Lower Austria, the municipal data service, is the first to take advantage of this opportunity and will integrate this prototype into its gem2go community app.²

More about the
sandpit process:

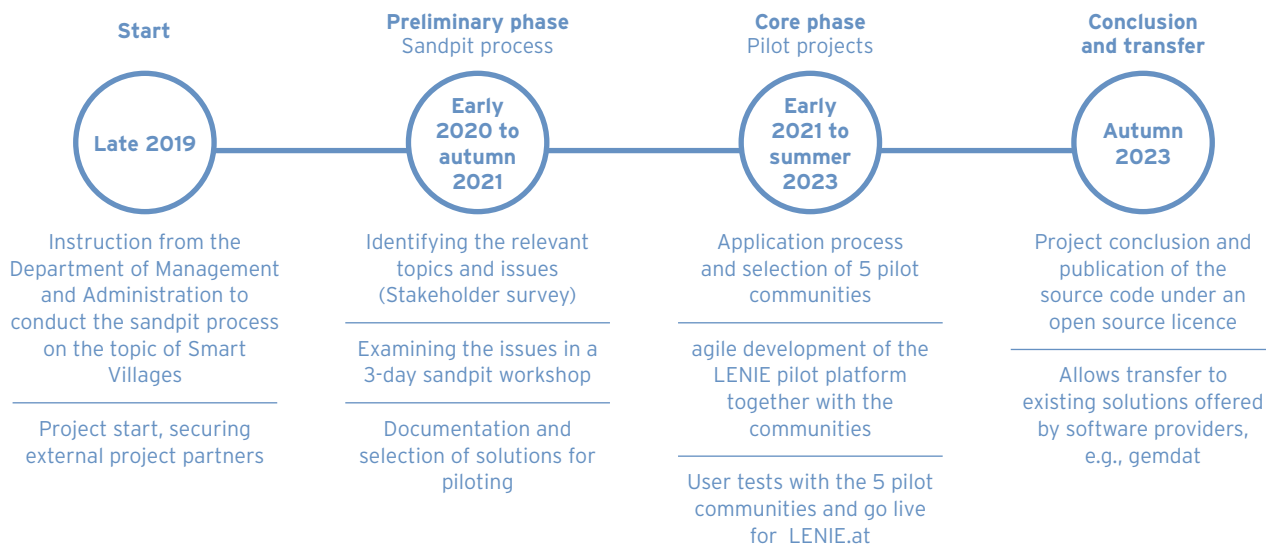


More
about LENIE:



LENIE closing event with representatives from all the pilot communities in October 2023.
© WST3

Overview of the LENIE development process



² LENIE implementation was coordinated by the Technology and Digitalization Unit, realised in cooperation with the EU service agency NÖ.Regional, ecoplus digital, FOTEC GmbH, the FH Wiener Neustadt research company, and co-financed by the European Union.

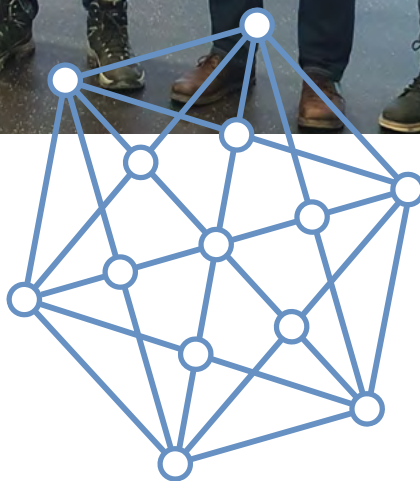


FH St. Pölten students in the House of Digitalization during the Hackathon 2023, using air quality data provided by the Department of Systems Engineering
© FH St. Pölten

“AI for Social Good” Hackathon using administrative data at the FH St. Pölten

The “AI for Social Good” course was held as part of the Master programme in Data Intelligence at the St. Pölten University of Applied Sciences (FH). The hackathon held in 2022 used a variety of Lower Austrian Provincial Government datasets to develop solutions to current problems with the help of artificial intelligence. Two Bachelor theses and one

Master thesis were written as a result of the hackathon. In light of the significant value this event represents for both the university and provincial administration, another hackathon was held in 2023 using the province’s air quality data. The students’ results were presented and jointly discussed with the relevant departments.



3. Current projects in the eight action areas

○ Impact direction

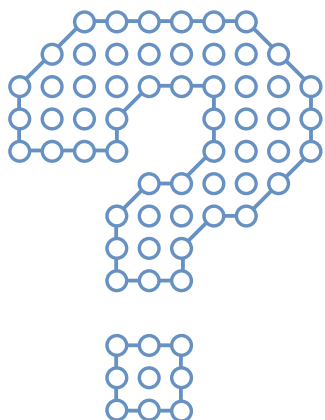
Digital fitness

○ Action fields

- Awareness raising
- Training and continuing education
- Research and innovation







Action field: Awareness raising

The awareness raising action field covers analysis of current topics and trends, the potentials and opportunities offered by the digital transformation, and the involvement of all age groups.

Key indicators and results in 2023

~ **6,400**

guests at 73 events
in the House of
Digitalization



Federal Government Digital Competence Campaign and Lower Austrian Digital Skills Dialogue

The objectives of the Digital Skills Campaign launched by the federal government are to employ more IT specialists, especially female IT experts, and promote digital talents by 2030. In addition, a national reference framework called DigComp 2.3 AT will be introduced to make digital skills measurable and comparable. An important component of the planned Digital Skills Campaign is joint strategy development with the federal provinces and stakeholders, which is why in 2023 the Digital Skills Campaign involved experts and partners from Lower Austria. Model examples were presented, and ideas and suggestions for improving digital skills were contributed. As a result, Lower Austria also digitally signed the Digital Austria Pact to improve digital skills.

6

episodes of the
Virtuelle Blaupause
podcast.³

750

people subscribed to
the Jugend forscht
digital! YouTube
channel⁴

1,470

participants
in cybersecurity
roadshows

More
information:



³ The podcast is published by the House of Digitalization. It reports on digital technologies and digitalization projects.

⁴ The YouTube channel is run by the Department of Science and Research at the Office of the Lower Austrian Provincial Government.



© R.Herbst

ti:n – Transdisciplinary Innovation Network | Innovation connects!

ti:n is designed to generate ideas for solutions and inspiration for Lower Austria, with its offerings and formats supporting a digital approach and an innovation culture. ti:n provides the structure within which to consider current issues in business, administration, science and civil society, in workshops and similar formats. In the ti:n Summer School, the participants apply design thinking to develop solution concepts. In 2023, these focused on the topics of Blackout Preparation, Complaints Management in the Context of Renewable Energies, and Effective Feedback in Care.



Cybersecurity Awareness roadshow continues by touring local districts

In April, the House of Digitalization held a cybersecurity conference attended by Federal Minister of the Interior Gerhard Karner together with specialists from IT and business. They launched a Lower Austria roadshow to address cyber threats and raise awareness amongst administrative, business, and educational institutions. The tour stopped at schools, the political district authorities, and district offices of the Chamber of Commerce. With stops in Krems, Klosterneuburg, Scheibbs, St. Pölten and Wiener Neustadt, the tour reached 610 pupils, 400 administrative staff and 190 companies. The successful initiative will continue in 2024 as a district tour with the Ministry of the Interior and the Lower Austrian Chamber of Commerce to continue to emphasise the importance of cybersecurity and reach an even larger audience.



INTERREG Digital Village project for more cooperation

The INTERREG Digital Village (DigiVil) project improves cooperation between key actors in regional innovation systems and promotes the development of further digitalization approaches throughout the SKAT programme region.

By adopting new forms of cooperation, such as between the local municipality and the university, the potential for digitalization in cross-border cooperation is being evaluated and implemented in pilot activities. The results will be summarised in the form of a transferable guideline and catalogue of measures, creating the basis for transferring know-how to other municipalities and regions. The project will be strategically anchored by developing a sustainable concept for a cross-border incubator network to promote virtual working and learning spaces, as well as digital innovation and learning labs in the border region.

More
information:



Action field: Training and continuing education

The Training and continuing education action field teaches digital skills. It starts at kindergarten age and includes all sectors of the population.

Training in digitalization at

www.virtuelleshaus.at



308

Applications for Lower Austrian "Work Environment 4.0 - Education" funding approved⁵

35

Webinars held as part of the Lower Austrian Provincial Government's training programme.

40

E-learning courses offered as part of the Lower Austrian Provincial Government's education programme

110

additional places approved on STEM programmes at universities of applied science in Lower Austria

Key indicators and results in 2023



101

Applications for Lower Austrian "Work Environment 4.0 - Retraining" funding approved⁶

> 40

STEM-related programmes offered at universities and universities of applied science in Lower Austria

> 20

digitalization-related programmes at universities and universities of applied science in Lower Austria

First conference of the Lower Austrian Provincial Government's IT coordinators

In 2023, the annual training days for the Lower Austrian Provincial Government's 140 IT coordinators were held in a completely new format, during a 2-day conference. In addition to a panel discussion and presentations on the topic of cybersecurity and data protection, there were intensive exchanges with IT managers in the Lower Austrian Provincial Government on topics such as IT risks in service operations, IT trends, and the IT workplace of tomorrow.

In addition, workshops were held to examine the current requirements for training IT coordinators and the parameters for functional team organisation. Each IT coordinator is responsible for the concerns of up to 80 provincial employees on a daily basis. With around 500 different software applications, the work of the provincial administration is hugely diverse, and IT coordinators are faced with a broad range of tasks. Close cooperation and good networking at the conference provided the necessary support.

⁵ 548,971 euros was approved for Lower Austrian "Work Environment 4.0 – Education" funding. The funding is managed by the Department of Labour at the Office of the Lower Austrian Provincial Government.

⁶ 189,464 euros was approved for Lower Austrian "Work Environment 4.0 – Retraining" funding. The funding is managed by the Department of Labour at the Office of the Lower Austrian Provincial Government.



The FabLab workshop on tomorrow's technologies was also held during the Digitalization Forum and is a cooperation between FabLab and the TIN.Academy.
© weinfranz

FabLab Lower Austria - Workshop of the future in the House of Digitalization in Tulln

The FabLab allows school classes and young people to try out the technical equipment (such as 3D printers, VR glasses, laser cutters, augmented reality) in a series of free workshops, and to use them to develop projects. The workshops are held in cooperation with the Technologykids science education association and the FH St. Pölten. The lab is operated by the Department of Science and Research.

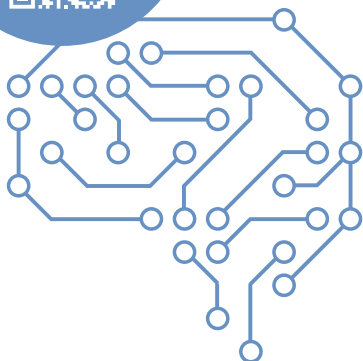


New webinar series “Digi Wissen for founders”

Digitalization offers great business opportunities, especially for young entrepreneurs. The Digi-Wissen kompakt webinar series run by start-up agency riz up offers new information about online marketing, artificial intelligence and ecommerce to young companies and anyone interested in setting up a company in Lower Austria.

riz up offers a comprehensive range of free services on all aspects of business management: from business plans, marketing and sales to future trends and much more. Digital topics in particular are in high demand.

More
information:



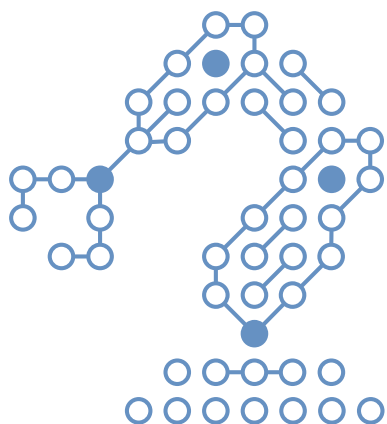
Digitalization in schools – the Lower Austrian way

In the 2023/2024 school year, lower secondary school students in grades 5 to 8 are being equipped with digital devices as part of the device initiative. They will also be taught about digitalization in the new compulsory subject Digital Basic Education, with the devices integrated into teaching in a range of subjects. From the 2024/2025 school year, grade 8 pupils who have completed the Digital Basic Education course will move on to upper secondary schools. To this end, a task force from the Department of Education in Lower Austria has developed handouts for the school principals and distributed them to the schools, allowing them to prepare for the new intake. This year, attention will turn to pupils as they prepare to

leave primary school, and our 626 primary schools and 74 special needs schools will be invited to join in embarking on the path of digitalization.

In 2023/2024, the BHAK/BHAS Horn will start offering the subject “Management. [Cyber.] Security”. Find out more:





Action field: Research and innovation

New digital opportunities for technological product, process and organisational innovations are being developed within the Research and innovation action field. The Digital fitness measures will help to secure and create new jobs.

Key indicators and results in 2023

325

digi Investment
applications
approved.^{7,8}

26

participants in 3 rounds
of the digi Kickstart
workshop series⁸

113

digi Assistant
applications
approved.⁸

2.16 million

euros for RTI for
(practical) research
projects⁹



AI-Powered Visualizations in Radiology

Advanced Visualization Technology (AVT) is increasingly being applied by the radiological institutes in Lower Austria's hospitals. AVT uses artificial intelligence to support radiologists in interpreting CTs and MRIs. The AI-supported solution can create special views as well as standardised measurements, and is now indispensable for fast, high-quality diagnosis in areas such as oncological, cardiology, pulmonology and traumatological care. Patients benefit from fewer examinations, thus reducing their radiation exposure or doses of contrast agent. In addition, the use of standardised calculations increases patient safety. Furthermore, these optimisations and the reduction of repeat examinations help to reduce the cost of radiological care and relieve the burden on healthcare staff.

⁷ A planned subsidy of max. 6,771,936 euros was approved for digi4Wirtschaft-Investment.

⁸ The digi4Wirtschaft programme is run by the Department of Economy, Tourism and Technology at the Office of the Lower Austrian Provincial Government and the Chamber of Commerce.

⁹ The Call was tendered within the RTI action field Digitalization, Intelligent Production and Materials, and managed by the Gesellschaft für Forschungsförderung NÖ.



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Lower Austria Ecoplus Cluster: Innovation through cooperation

For more than 20 years, the Lower Austria ecoplus Cluster has been promoting cooperation between and technology transfer to companies, and helping to develop Lower Austria's key construction, food, mechatronics, and plastics sectors, to ensure their future competitiveness. To date, more than 5,800 project partners have successfully worked together in over 1,000 inter-company projects. In the Bau.Energie.Umwelt Cluster NÖ, for example, work is being done to leverage climate change as an opportunity for innovation in the construction industry: The Cool*Buildings research project deals with sustainable cooling methods for residential buildings, including a technology comparison.



ELK Experience Center – an interactive house building experience

ELK Fertighaus GmbH is the Austrian market leader for prefabricated house construction, and a longstanding partner to the Lower Austria ecoplus Green Building Cluster.

With its new Experience Center in the Blue Lagoon in Vösendorf, ELK simplifies the complex construction process, offering transparency and fixed costs. Spread over an area of around 500 m², visitors to the center are offered individual consultations combined with a tour of a show home, the purchase of a prefabricated house, and various digital technologies. For example, anyone interested in building a house can wear VR glasses to immerse themselves in a 3D depiction of their future home to feel the atmosphere of the rooms and examine different furnishing options. The 3D experience can be customised at any time and shared with friends and family.

More
information:



Smart Digital Industries and Services Research Studio opened at FH St. Pölten

The Research Studios Austria Forschungsgesellschaft (RSA FG) has opened a new Research Studio Smart Digital Industries and Services (SDIS) at the FH St. Pölten.

The studio is designed to develop innovative, Industry 4.0 and 5.0-compatible solutions in order to derive the greatest possible benefit from digitalization. The multidisciplinary team is engaged in the research and transfer of technologies, methods, and practices to support industrial and commercial production. The studio also provides digital services to establish or enhance connectivity and transfer between the various application areas. Specific research topics include Industry 4.0/5.0 and the transfer of smart and digital technologies between agriculture, food technology and production, and the circular economy.

More
information:



○ Impact direction

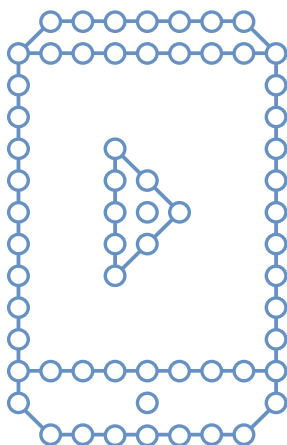
Digital infrastructure

○ Action fields

- Connectivity
- Innovative infrastructure







Action field: Connectivity

Connectivity means giving society, businesses, and the public authorities the chance to focus on digitalization and assume responsibility for digital matters. Digital controls which incorporate data security and data sovereignty turn existing infrastructures into intelligent infrastructure.

Key indicators and results in 2023

Winning digi-contest 2.0 project

nöGIG is active in

140

rural communities.

A total of

86,000

connections have been implemented so far in accordance with the Lower Austria model

With a

55 million

euro budget, FTTH Netz Waldviertel Projekt GmbH is driving the expansion of fibre optics

4,400

fibre optic orders have been received by FTTH Netz Waldviertel Projekt GmbH

135,141,301

route calculations on AnachB.at (website and app)

> 50,000

downloads of the Lower Austria Guide app



Digitalized construction permits in Lower Austria – we set the course

Building Information Modelling (BIM) is fundamentally changing the planning process for construction projects. Instead of 2D drawings, powerful intelligent software is increasingly being used to model buildings in 3D. However, the advantages of this digital planning method have not yet been realised in the approvals process. Therefore, during the project, legal requirements of the Lower Austrian Provincial Government will be adapted to enable project submissions in electronic rather than paper-based form. Furthermore, the necessary technical requirements for digital submission and (partially) automated project review will be defined and created. Where possible, AI can be used to partly automate future submission and review processes and make them transparent. The project will run for around 2 years.¹⁰

¹⁰ In addition to the political district authorities, the Departments of Plant Law, Building and Regional Planning Law, the IT Department of the Lower Austrian Provincial Government and the services of experts at the Construction and Civil Engineering Division, representatives of planners, cities and communities are required as partners.



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Ordering work clothes and uniforms directly from your smartphone

Since 2023, employees of the Roads Division have been able to procure their uniforms directly in the Pilo programme. That means 2,600 manual staff can now order their work and service clothes directly via their smartphones, as well as viewing their current points balance and any size changes. In 2024, this tool will also be extended to technical staff.



nöGIG: Fibre optics for all of Lower Austria

The Lower Austrian Fibre Optic Infrastructure Company (nöGIG) is driving the expansion of open, public and future-proof fibre optic connections to individual households (FTTH) in rural areas of Lower Austria. Its goal is to close the digital divide between urban and rural areas and provide reliable and ultra-fast internet to all citizens and businesses. On behalf of the Province of Lower Austria, nöGIG plans, constructs and operates the infrastructure according to the highest quality standards. The majority of the infrastructure will remain in public hands over the long term. nöGIG supports community-owned projects as a service provider. The open model encourages competition among Internet service providers, which means more choice and high-quality services on the network. nöGIG is active in around 130 rural communities and has already successfully implemented over 79,000 connections in accordance with the Lower Austria model. By 2030, the goal is to have province-wide, gigabit-capable connections throughout Lower Austria to strengthen the region economically and socially.

More information:



The Lower Austria model works: Ten Waldviertel municipalities are installing broadband infrastructure

Ten municipalities in Lower Austria's Waldviertel have come together to found the FTTH Netz Waldviertel Projekt GmbH which will drive the expansion of fibre optics in the region with a total budget of 55 million euros. Demand is high: the company has received over 4,400 orders, which represents order from two-thirds of all households. The construction work will continue until 2026, with customers in the first construction phase supplied with broadband as early as summer 2024.

In view of the high connection rate, the Waldviertel project is considered a national showcase project. It is the sixth largest broadband project in Austria, mainly due to excellent cooperation between the municipalities and the fibre optic ambassadors. However, the project can only be realised because it is receiving both provincial and federal funding.

More information:





Action field: Innovative infrastructure

The digital infrastructure measures will strengthen rural regions, and further improve the quality of life in Lower Austria.

Key indicators and results in 2023

11,051

new e-vehicles
(BEV and hybrids with
plug) registered¹¹

536

fast charging points
(charging capacity
over 50 kW) in
Lower Austria

3,803

normal charging stations
in Lower Austria

>1,400

users and licences
for digital speech
recognition in the Lower
Austrian provincial
health agency
(NÖ LGA)¹²



Tele-wound management pilot project

The tele-wound management project conducts wound follow-up monitoring and treatment for residents of nursing care centres, avoiding the need for them to travel to a wound outpatient clinic. In the project the care centres use a wound camera designed for use in a clinical environment to take high-quality photos. In parallel, the care staff set up a video conference with wound management experts at a wound outpatient clinic, so that the images can be discussed in real-time, and residents' questions answered. The experts at the clinic provide any necessary instructions for further wound care. The service is currently being piloted as a cooperation between the Wallsee, Melk and Scheibbs care centres with the regional hospital in Melk. Assuming the long-term outcome is positive, it will be extended to other care centres and clinics.

¹¹ Equivalent to 25% of all new passenger vehicle registrations (43,567 vehicles).

¹² NÖ Landesgesundheitsagentur (provincial health agency)



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Smart communities

offer enhanced connectivity and public services for rural municipalities. The aim is to give users insight into complex sensor data. The research project focuses on transparent connectivity across different LP/WAN service providers and develops a system-of-systems concept for data exchange between municipalities. Pilot municipalities will be involved in surveying requirements, implementing use cases, and evaluation. Participating institutions: UWK, IMC FH Krems, FH St. Pölten and FOTEC.



New online service for citizens of Lower Austria

The Lower Austrian Provincial Government is making its interaction with citizens and companies more user-friendly. In autumn 2023, the IT Department of the Lower Austrian Provincial Government started developing a service portal for submitting digital applications, for exchanging documents during an interactive procedure, and for viewing files. Citizens can also gain an overview of all ongoing and completed proceedings at the Lower Austrian Provincial Government. Using a low-code/no-code platform, the application forms and procedural steps can be configured and allow end-to-end processes, from application to approval. The first processes should be implemented and operational by mid-2024, with others to follow quickly as no time-consuming programming services are required. The service portal will have a responsive design and is therefore optimized for access via a tablet or smartphone.



Speech recognition in the clinical setting

Speech recognition has been used in the field of radiology for many years. Since 2022, the Lower Austrian provincial health agency (NÖ LGA) has offered the service to all departments in Lower Austria's regional and university hospitals. This makes documentation processes significantly more efficient, relieving the burden on clinical staff. In addition to a high detection rate, functionality in noisy environments is also particularly important – the selected product offered by the technology leader relies on the use of AI for this purpose, and with high-quality microphones reducing ambient noise.

In 2023, an initiative was launched to integrate speech recognition more broadly into medical documentation processes. To this end, a further 700 doctors were equipped with this functionality. In further expansion stages, speech recognition will also be expanded to include voice control and extended to other occupational groups.

○ Impact direction

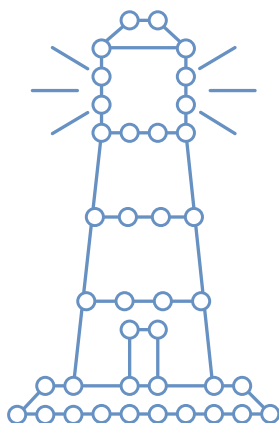
Digital solutions

○ Action fields

- Networking platforms
- Data
- Digitalization in administration







Action field: Networking platforms

Networking platforms encourage new socio-technical developments such as improving communications between government and the public, and economic and social involvement.

The dictionary published on the virtual House of Digitalization website explains the terms related to the topic of digitalization.



Key indicators and results in 2023

~ 1,500

pupils visited the
FabLab in 2023

> 13,500

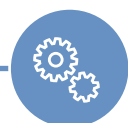
guests visited
the Man+Machine
exhibition

> 900

companies have
actively considered
what the digital
future will bring

172

digitalization projects
registered with the
virtual House of
Digitalization



One year of the House of Digitalization lighthouse project

The physical version of the House of Digitalization successfully went into full operation last year. Covering an area of 4,200 m², it can be used for many purposes, including an annually changing exhibition in the so-called showroom, event locations for hire, a range of courses offered by the University of Applied Sciences Wiener Neustadt, or a FabLab for practical knowledge transfer. The offers are met with great interest: around 1,500 pupils visited the FabLab in 2023, over 13,500 guests visited the Man+Machine exhibition, and 6,400 participants were present at the 73 events to date. As an event location, the House of Digitalization has won the international AV industry award in the category Venue Project of the Year together with technology partner KLT. After the multimedia exhibition Man+Machine 2023, the new exhibition 2024 SMART DATA + YOU opened on 1 February. The new exhibition is associated with a special offer for SMEs: In the workshop "Prompting in everyday business life", SMEs can optimize the use of AI in their daily workflows.



Digitalks on Tour workshop format explores AI for SMEs

The practical Digitalks on Tour event series is designed to show small and medium-sized enterprises (SMEs) how digitalization can optimise their business processes and workflows. Following the kick-off in the House of Digitalization in June 2023, two workshop series for SMEs were offered. The first examined the topic of AI. Developed by the Province of Lower Austria, the Lower Austrian Chamber of Commerce, and ecoplus, respected experts presented AI tools including ChatGPT, Google Analytics 4, and the Microsoft 365 Copilot, and showed how they can be integrated into everyday business life.

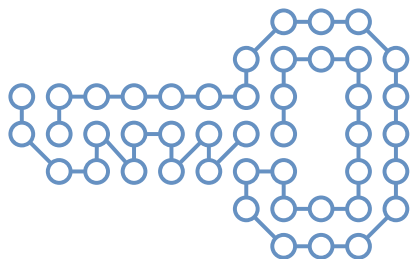
In November 2023, the second workshop series on the metatopic of Digital Processes was launched. It focuses on companies applying digital solutions to strengthen customer satisfaction. The workshops show how workflows can be made even simpler, more efficient and – following the motto “The customer is King” – even more service-oriented. In 2024, the workshop series will be continued as the second House of Digitalization focus for SMEs.



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Action field: Data

Measures in the Data action field are designed to develop new business models and increase the quality of the service sector by enhancing the use of data and evaluations.

Key indicators and results in 2023

1,029,039

online applications submitted to the Lower Austrian Provincial Government

~ 200

online forms published by the Lower Austrian Provincial Government

99.9 %

of forms issued by the Provincial Government available online

533,259

Lower Austrian housing support applications submitted

around

54

years of time saved in the Provincial Government by using online forms



MEPI 2.0 for notifiable infectious diseases

The MEPI application, whose value was proven during the COVID-19 pandemic, is being developed to cover other notifiable infectious diseases. The programme has been flexibly extended so that as many additional fields as required per disease can be configured in the mask without the need for new programming. The selection fields have also been adapted to mirror the federal EMS programme. These now support ELAK integration as well as the configuration of segregation requirements and traffic restrictions. The changes also include integrating the new epidemiological handbook for Lower Austria in order to better support the political district authorities. Currently, five other diseases are managed by the programme (Mpox, Campylobacter, diphtheria, measles, and Salmonella), and in future this will be expanded to include other notifiable infectious diseases. Implementation was carried out by the IT Department of the Lower Austrian Provincial Government and the Epidemiology section in the Department of Health.



Inspection app for the water authorities

The mobile app is designed to document all on-site water inspections (online/offline), and directly synchronise them with Lower Austria's water information system (WIS NÖ) where the information can be digitally processed. The digital documentation of water inspections (water status) has been achieved. By the end of 2024, the digital documentation of all water inspections (facility inspections) as well as inspection results for which consensus is lacking will also have been implemented.



Robotic Process Automation for processes in the Road Group

Robotic Process Automation (RPA) is a software technology for automating digital tasks. The advantages for users are that no new interfaces or tools are needed, automation is achieved through recording, the IT structure does not have to be changed, it is simple to operate, and therefore it streamlines the processing of large amounts of data.

In the Road Group, this technology is being tested for a wide variety of manual, repetitive, and rules-based processes. They include automatically reading tenders, retrieving tender data from a wide variety of programmes, and automatically entering data into forms.

The aim of the project is to increase efficiency and reduce staff workloads. The pilot runs for a year through to mid-2024, followed by project validation.



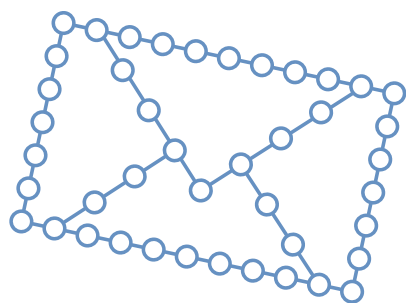
Use the app to go to the menu

The LEADER Region Weinviertel Ost project is implementing an app designed to provide restaurant owners and their guests in the Dreiländereck region of the Weinviertl with a modern, digital, and easy to use platform, especially for clearly presenting lunch menus.

The *Menü Wirt* web app is intended to allow restaurant owners to update their daily menus in real time, and to publish contact information and opening times. Guests can call up the current menu at any time and on any end device by means of a simple search. The idea is to encourage more guests to visit regional restaurants and guesthouses.

More
information:

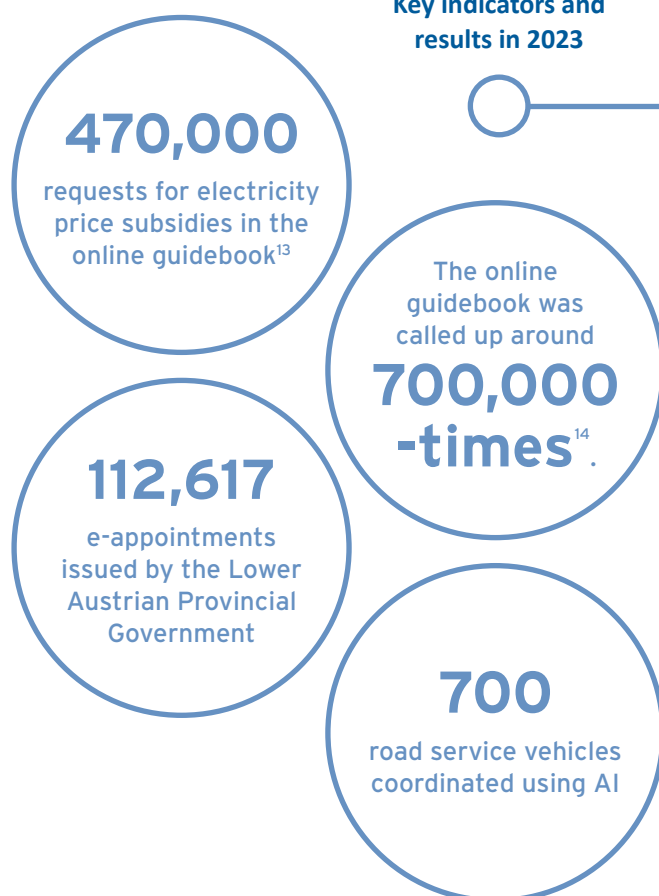




Action field: Digitalization in administration

Digital applications simplify administration and create added value. They are a driver for the region, encouraging better cooperation between its 573 municipalities.

Key indicators and results in 2023



Digital management of the blue-yellow electricity price discount funding scheme

Electronic handling of the blue-yellow electricity price subsidies with external support – the project was designed to allow energy suppliers EVN, VERBUND and Wien Energie to manage the price subsidies for their customers.

The energy suppliers developed their own application forms while the IT Department of the Lower Austrian Provincial Government developed the interfaces needed to check data against the central register of addresses (ZMR) and in our funding software (FX – duplicate checks), and to transfer the data to our funding software for the EVUs. The project involved the Department of Environmental and Energy Management, IT Department of the Lower Austrian Provincial Government, and the three energy providers EVN, VERBUND and Wien Energie. The funding scheme ended on 30.09.2023. Customers were able to apply for subsidies with the three energy suppliers through to 31.03.2023. The credit notes were issued by each energy company together with their quarterly or annual electricity bills.

¹³ Implemented by the LAD1 Citizens' Service Office, part of the provincial administration's IT Department, 3i Software Dienstleistungen GmbH, and departments responsible for subsidies.

¹⁴ The aim of the new online guidebook is to provide citizens with clear and comprehensive information about the conditions that need to be met for each funding offer, and to reduce the number of telephone calls to the Citizen's Service Office.



KB-Neu application for granting disaster aid

KB-Neu is a new disaster loss recording application for the granting of disaster aid. It is designed to process applications quickly, efficiently and in a user-friendly manner to reduce maintenance and save time. The application is used to create damage assessment protocols, to collect and manage applications simply, and to generate documents automatically. Implementation is planned for 2024 and will be carried out by the Department of Agricultural Subsidies in cooperation with the provincial administration's IT Department.



App for residency permits (AnNA)

AnNA is a nationwide software application used to handle residency processes such as the granting of residence permits to third-country nationals. AnNA has now replaced Lower Austria's own IT application. Since its introduction, all NAG (Settlement and Residence Act) authorities (Department of Police Matters and Political District Authorities), as well as Austrian embassies that accept applications on behalf of the domestic authorities, have been working with this application. File management (applications, documents, etc.) and communication between the authorities is now electronic, using AnNA and a variety of interfaces with public registers (e.g., register of foreign nationals, central register of addresses (ZMR)), which speeds up proceedings. AnNA also gives the authorities access to more information.

The IT Department of the provincial administration, the Department for Police Matters in Lower Austria, as well as the Political District Authorities of Wiener Neustadt and Hollabrunn have been actively involved as representatives of the NAG working group (e.g. in application testing) since the start of the project.



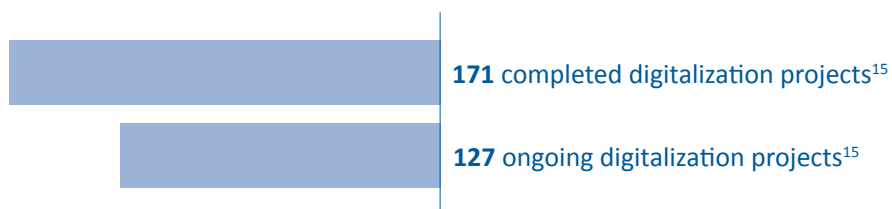
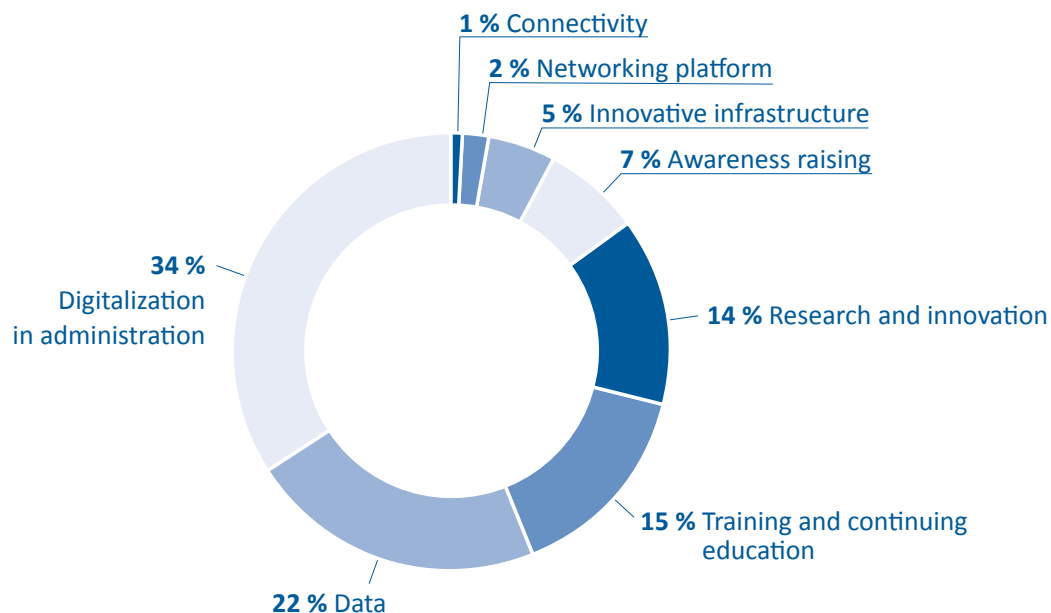
Lower Austria SAP – Digital Finance

The accounting software is over 40 years old and will be replaced by an SAP system by 2025. The new system will include financial planning, budgeting, financial accounting, procurement, and business partner management. The concept was developed by 150 representatives and tested in pilots. Since March 2023, wide range testing has been taking place at other offices, with all the processes and functions being comprehensively tested.

Technical completion of the SAP system was scheduled for the end of 2023. Selected sub-areas of the SAP system, in particular business partner accounting, will be put into operation in 2024. The go-live of the entire system in all central and decentralised offices of the Office of the Lower Austrian Provincial Government is scheduled for early 2025, giving sufficient time to create the organisational framework for the introduction of SAP. This will be followed by the introduction of SAP in the political district authorities.

Digitalization projects in the Lower Austrian Provincial Administration in 2023

Digitalization projects with a focus on¹⁵ ...





4.

Outlook for 2024

The Digitalization Strategy for Lower Austria pursues concrete goals which require cutting-edge measures to achieve. Implementation of the strategy in 2024 again involves numerous digital solutions for the region's citizens, businesses, scientific bodies, and public administration.

Once again, there was a focus for implementation of the strategy in 2024: this year's topic for the Technology and Digitalization Unit was **Digital Communities**. A range of activities and measures were established to support municipalities in Lower Austria in their digital transformation.

A range of digitalization support programmes was again made available to **businesses in Lower Austria**. They include the new workshop on "Prompting in everyday business life" held at the House of Digitalization, designed to help SMEs optimize the use of AI in their daily workflows.

Cooperation with the Federal Ministry of the Interior and the Chamber of Commerce on "Cybersecurity Awareness" was intensified with a roadshow touring local districts. The "Digitalks on Tour" series to support the digital transformation in business processes was also expanded.

International activities, such as the recent Estonian-Lower Austrian symposium serve to strengthen networks and knowledge transfer.

The new SMART DATA + You exhibition in the **House of Digitalization** offers a critical overview of data intelligence and personal data use, giving visitors insights into the world of data analysis and application.

The "Digital Everywhere" programme, part of the digital skills campaign, is designed to enhance **citizens'** digital skills: in 2024, more than 600 workshops will be run to increase basic digital skills in the regions.

More information
about digitalization in
Lower Austria is available
on the province's website:





digi report
to download and
as an interactive
report:



www.noel.gv.at

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