

ARTIFICIAL INTELLIGENCE STRATEGY

Using digital transformation.
For our state and our people.

Lower Austria has a realistic vision for pursuing the opportunities provided by artificial intelligence. Our aim is clear: we want to actively shape this transformation to create a real benefit for the people in our state. Artificial intelligence will help us to make our region stronger, secure jobs and create new opportunities for the economy and our society. So that we can improve quality of life and shape the future of Lower Austria.

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ARTIFICIAL INTELLIGENCE IS REALITY

Artificial intelligence (AI) is well-established in our society. Whether it's language assistants, navigation apps, automatic translations or online shopping recommendations, AI is already working behind the scenes in many applications that we use every day. Whereas earlier digitalization steps were mainly about speeding up routine processes, AI is now also able to support with complex tasks such as recognizing large amounts of data, creating texts or preparing analyses. This makes things easier but also comes with risks: AI systems can make mistakes, build on biased data or make decisions that are not always easy to follow. The greater the number of processes and decisions that are supported by AI, the more important it is to have clear responsibilities, comprehensible procedures and human oversight.

Lower Austria is following this development in a moment of transformation. The world is becoming more complex and changes are happening more quickly. An ageing population and an increasing skills shortage are posing real challenges for the economy, society and administration. AI can play an important role here if it is used responsibly and in a targeted manner to support work processes, relieve the pressure on skilled personnel, increase productivity or enable new forms of collaboration. AI cannot solve every problem but is an effective tool to secure long-term prosperity and quality of life in Lower Austria.

Lower Austria has decided to play an active role in the transformation. This means using the potential of AI to generate real benefits for people in their daily lives, jobs and in society whilst always being aware of the risks. It is important that nobody is overwhelmed or is left behind due to their age, background or limited access. This requires having clear goals, quality-assured data and suitable competences. When used correctly, AI opens up opportunities for reconsidering existing structure and processes in business, society and administration.

The AI strategy for Lower Austria is an integral part of the digitalization strategy and aims to use the digital transformation for both the state and its people. It makes a direct contribution to achieving the three goals: "secure jobs and create new ones", "strengthen rural regions" and "improve quality of life".

Actively approaching the area of AI requires more than just good intentions. This strategy is a call to action and is intentionally designed as a starting point. Specific measures, responsibilities and details will be developed in the coming years together with all the parties involved. The strategy is a response to five questions:

- Why does Lower Austria want to act now?
- What does Lower Austria want to achieve?
- Where will Lower Austria create the correct requirements?
- How will Lower Austria use AI responsibly?
- How will Lower Austria successfully implement the AI strategy?

The strategy starts by addressing the future opportunities for Lower Austria through the use of AI. These are followed by the focus areas in the fields of action and the guiding principles for using AI in Lower Austria. It ends with an outlook for how Lower Austria will continue to develop AI in the years ahead.

Creating the future means actively using artificial intelligence – for the state, economy and people in Lower Austria.



FUTURE OPPORTUNITIES FOR LOWER AUSTRIA

Lower Austria has a clear notion of what it wants to achieve with AI. The strengths of the state, a strong SME sector, decentralized structure and a broad regional basis can be used to create specific opportunities for the economy, regions and society.

AI can reduce the initial hurdles but the route to creating the actual benefit requires orientation and support. Lower Austria accepts both the potential and the responsibility, in line with the motto: “keep your feet on the ground and keep reaching for the stars”.

Building on strengths and exploiting new opportunities

Lower Austria is relying on a targeted approach: strengthening strengths. The economic breadth, regional diversity and well-developed SME sector are not a disadvantage, but rather a strategic advantage. Small businesses and decentralized structures can use AI applications in a targeted manner without having to build any large infrastructure or specialized IT departments. Lower Austria provides targeted support, practical offers and clear conditions. Using AI for routine tasks creates space for innovation and human creativity. Companies can strengthen their competitiveness through more efficient processes, new products and data-based business models. Agriculture plays a significant role in Lower Austria and offers particular potential. Precision agriculture, optimized use of resources and data-based decisions strengthen efficiency, sustainability and competitiveness.

Enabling and empowering people to use AI

The increasing spread of AI is also changing the daily lives of many people. AI systems are already influencing decisions in many areas of life, for example financing, medical diagnoses or application processes. Unlike earlier technologies, AI is increasingly being used to make assessments that were previously only made by humans. This creates new opportunities but also new uncertainties and risks.

Lower Austria is therefore focusing on enabling people in a targeted manner: they should understand AI, critically question the results it produces and be able to use it independently. It's more than just the simple use of technologies; it's about the ability to make informed decisions on a daily basis.

In a large state such as Lower Austria, ensuring that AI skills are taught throughout the entire state is a particular challenge and, at the same time, a key task. Education in this area must therefore begin at an early stage and continue throughout all stages of life.

Anyone who understands and can use AI plays an active role in shaping transformation. Developing AI literacy strengthens both individual empowerment and the innovative capability of the entire state.

Positioning Lower Austria as a visible region for innovation

The targeted use of AI is fundamentally changing the underlying conditions for innovation. There are fewer initial hurdles because many applications can be implemented without the need for major infrastructure. Unlike with previous technology waves, which primarily benefitted major players, AI-supported innovation is also accessible to smaller businesses and regions. Data-based systems enable continual improvements and new quality standards. Provided that the data quality is adequate and the legal options are used, new approaches may emerge in some areas to solve problems that have previously been difficult to address – for example, medical screenings or forecasting supply shortages.

This dynamic also provides Lower Austria with the opportunity to position itself as a region for innovation. This requires identifying specific use cases and testing these in laboratories and on pilot projects. It's not only about whether they are technically feasible, but also whether they can be implemented from an organizational perspective and identifying the conditions to ensure that they are accepted in society. The results of tests that have proven to be effective are rolled out on a broader scale and lessons are also learned from less successful approaches.

Specific lighthouse projects make innovation tangible. They are created when Lower Austria is also willing to test the potential of AI in untapped areas. Projects with a high level of transferability and a measurable impact on people, businesses, or communities serve as examples. These include the digital display window in the House of Digitalization and the annual digi report. Such initiatives create a sense of trust, show what AI can offer in daily life in Lower Austria and inspire people to try things out across different sectors. This not only strengthens development within the state but also establishes it in a national and European context.

Lower Austria is actively using artificial intelligence to increase competitive ability, improve quality of life and provide equal opportunities. This is done by building on its strengths, enabling people to handle AI independently and positioning itself as a visible region for innovation.



PRIORITIES IN FOUR FIELDS OF ACTION

The targeted use of AI unfolds its potential where structured data is available, processes are clearly defined and the interaction is developed in a targeted manner. Lower Austria has therefore identified four fields of action:

economy, administration, competences and regions. Each area states a clear goal, sets its own priorities and contributes to the shared aim of using AI effectively, responsibly and with clear value for the state and its people.

Economy and transformation

The Lower Austrian economy is characterized by a wide range of industries and a large share of small and medium-sized enterprises. To date, digitalization has helped to speed up processes and record data. AI takes this further: it can learn from operating data, prepare decisions and alleviate the burden of recurring tasks, even without a large IT department. If used properly, AI can open up new opportunities, design more efficient operating processes, automate operating obligations and make companies more competitive in the long term. Proactive maintenance, data-based support for making decisions and the targeted use of operating data help companies to use resources more efficiently and not just reactively when problems arise, but rather in a forward-looking and strategic manner. New business potential is also created through data-based offers, specialization in niche areas and tapping into international markets. In the area of tourism, AI-supported applications enable personalized offers, more efficient marketing and a better networking of regional services. The targeted use of AI-supported assistant systems enables companies to increase productivity and relieve the burden on specialists. Existing AI training offers with an industry focus can also be further developed.

Networking plays a key role. Lighthouse projects from the House of Digitalization or offers from technology and innovation partners (TIP) make opportunities visible and help companies to implement them. Real labs support knowledge transfer. Accessible possibilities can also be created to test AI applications and receive targeted support. The applications can then become visible, accessible and quickly effective on a broad scale.

A significant goal is to help SMEs and businesses use AI in a productive, secure and value-adding manner.

Rethinking administration

Administration is facing a variety of challenges such as rising costs, limited resources and highly complex processes. Earlier digitalization created online forms and mapped processes. AI goes further by anticipating needs, proactively dealing with matters and handling administrative services in the background. It therefore offers the possibility to design processes more efficiently and release the burden on employees while also improving the service quality.

Intelligent assistant systems support with requests, reduce the number of forms and make digital services more intuitive and accessible. More people can make use of 24-hour access via chatbots and digital channels and there are personal support options available to those who are either unable or unwilling to use digital pathways independently. ID Austria is an important instrument for secure and empowered access to digital administrative services. In scenarios where it is meaningful from a legal, organizational and social perspective, proactive services can complement traditional application processes and simplify administrative procedures. AI also improves the use of data for planning and control, for example in areas such as transport, energy or security. This requires good data quality and the targeted linking of existing datasets.

The Lower Austrian administration acts as both a pioneer and forerunner. Trust, transparency and the targeted development of employee competences form the foundation for responsible and sustainable use. Concerns about changes in the daily work routine are discussed openly and AI is consistently communicated as a form of support for employees and not their replacement. Certain activity profiles will fundamentally change and, at the same time, there will be new requirements for social and judgement-related competences. In instances where administrative decisions require discretion – for example, cases in the social sector that warrant special consideration – human judgment remains indispensable. AI can provide support here but not make decisions.

An important goal is to make administrative services simpler, quicker and available around the clock.

Competences and qualification

Confident use of AI is becoming a key prerequisite for social and economic participation. For a long time, the focus was on how to use digital tools. AI poses a new question: how can I understand what AI does and how do I decide for myself? The goal is to broadly embed AI skills while specifically fostering individual strengths. The focus is on offerings tailored to specific target groups and new learning formats that address different levels of prior knowledge and enable personalized learning. It's about strengthening the ability to act. People should be able to use AI applications meaningfully, critically categorize the results, recognize boundaries and make decisions autonomously.

Different skills are required depending on the individual life situation: citizens need guidance in their daily lives, employees need practical skills in the workplace, managers need leadership skills, and teachers need teaching skills.

Low-barrier formats, mobile offers in the regions and the integration of AI issues into existing events facilitate access, particularly in a large state such as Lower Austria where it's about reaching people where they actually are. Educational institutions, companies and public institutions are equally involved in the process. Embedding AI in teaching and education plans, qualifying teachers and creating new places of learning support the sustainable development of competences. Teachers and trainers play a key role here: they teach AI skills and demonstrate how to handle AI in a reflected and responsible manner. In future, municipalities, libraries or regional innovation spaces can be used as places for people to learn about AI competences together. The aim is to alleviate fears, open up new perspectives and strengthen the responsible use of AI in daily life and at work. This applies in particular to people who previously had less access to digital offerings. Competences and qualification are therefore the critical factor for using the opportunities of AI sustainably and actively shaping the digital transformation.

A key objective is to broadly establish AI competence as a prerequisite for participation, agency and responsible use.

Regions and daily life

Whether it's a doctor's appointment, shopping or a visit to the authorities – many things are already digital. AI goes one step further by supporting processes, making needs visible at an earlier stage and enabling services to be provided where they are needed in a more targeted manner. Lower Austria is the largest state in terms of area and has a variety of structures. It therefore offers great potential for solutions that are suitable for everyday use. AI supports local supply tailored to residents' needs, enables new mobility options, and strengthens volunteering and community life through better connectivity.

Municipalities play a central role by fostering a sense of identity and promoting personal interaction. They are accessible meeting places and actively involve disadvantaged groups in the development and use of AI – not just as a target group, but as active contributors.

One priority is the health sector. The targeted use of AI for health-care services, for example through telemedical applications, digital assistance systems and data-based management, can shorten pathways, reduce the burden on professionals and enable people to live independently at home for longer through AI-assisted support. In future, the Lower Austrian federal health agency will embed the comprehensive issue of AI in health and nursing care even more strongly in its strategy.

Agriculture plays a significant role in Lower Austria and data-driven decisions and AI-supported applications support efficiency and sustainable farming practices. AI can help to make businesses more resistant through, for example, better weather forecasting, resource-efficient management or forward-looking planning in the event of drought and other extreme weather conditions. AI can increase profitability, particularly for smaller businesses in areas such as viticulture.

These developments all require trust, secure exchange of data, responsible data use and a high-performance infrastructure. Innovation can then be introduced into people's daily lives.

An important goal is to introduce AI in the places where it can specifically improve the daily lives of the people in the regions of Lower Austria.



GUIDING PRINCIPLES

The guiding principles describe how AI is used in a responsible and targeted manner in Lower Austria. They are linked to the principles embedded in the "Our foundation" chapter of the state's digitalization strategy and tailor these to the use of AI to ensure that the specific demands and opportunities in Lower Austria are met.

There is a particular focus on strengthening the ability to shape and use AI in Lower Austria in the most confident, empowered and responsible way possible. This is done in accordance with shared European and democratic values and helps to further strengthen the state's long-term capacity to act and its digital self-empowerment.

AI will be used in Lower Austria ...

... only where it makes sense

AI is only used in places where it can create a clear benefit. Lower Austria consciously decides where and where not to use AI in accordance with its goal of acting responsibly and in a resource-efficient manner.

... with a focus on people

The use of AI is oriented towards people's needs. Trust and acceptance are created through transparent use, improved performance and tangible relief for people in their daily lives.

... to strengthen it as a region

AI is used in a targeted manner to effectively supplement the state's existing strategies. This enables Lower Austria to act more quickly and proactively and recognize goal conflicts at an early stage.

... courageously and with a desire to try things out

Lower Austria supports experimenting with AI and also uses less successful approaches as a source of learning. Instead of waiting for the perfect solution, it's about starting small, learning quickly and expanding on what has been successfully tested.

... with the aim of using it to make an impact

The state of Lower Austria is actively and responsibly shaping the future with AI. New approaches are well thought-out and used in practice to develop innovative solutions for central challenges.

... so that knowledge and experience reach everyone

Knowledge and experience from science, business, administration and society are systematically compiled and widely shared. Diverse and interdisciplinary teams support the responsible and effective introduction of AI. As a large state, Lower Austria relies on decentralized networking so that innovations can have an impact everywhere.

... so that nobody is left behind

Access to AI and the necessary competences should be open to everyone, regardless of age, background or prior knowledge. There is a special focus on structurally weak regions and SMEs to avoid a digital divide and ensure broad participation.

... with clear rules and responsibility

Clear rules create trust and enable innovation. The roles, responsibilities and boundaries of AI use are comprehensible and consistent with fundamental rights, applicable law and ethical principles.

Clear guiding principles create trust and enable AI to be used responsibly.



AI GOVERNANCE, IMPLEMENTATION AND FURTHER DEVELOPMENT

The AI strategy for Lower Austria is based on intense exchange and the expertise of a Lower Austrian AI Advisory Board with twelve members. The University for Continuing Education Krems supported the process from an academic perspective.

A clear management structure will be established to implement and oversee the AI strategy. As an independent external body, the Lower Austrian KI Advisory Board assumes an overarching advisory function and provides strategic expertise. It considers technological, social and regulatory developments and provides impulses for further developing and implementing the strategy. The Advisory Board meets at least once a year. It makes recommendations for adjustments if required to meet the dynamic changes in the area of AI.

In addition, a further internal AI Board will be established in the Lower Austrian state administration to assume an internal management function. It will consist of relevant areas from the state administration and meet regularly to drive forward the use of AI in a coordinated manner. It will act as a central platform for agreeing, prioritizing and developing specific measures for responsible, efficient and targeted use of AI in the Lower Austria state administration.

The AI strategy is intentionally defined as a living tool that will keep evolving. AI is continuing to develop rapidly. It brings new opportunities but also new questions and risks. The strategy will therefore be continuously reviewed, updated and adapted to new requirements. The goal is to provide long-term guidance and respond flexibly to technological, economic, and social changes.

The focus is on using AI where it creates measurable benefits, while being aware of the potential and risks. This includes, in particular, the state administration as well as state and state-affiliated organizations which can, through the targeted use of AI, improve specific services, use resources more efficiently, and actively drive innovation. Clear guidelines, transparency, and responsibility are the foundations for the trustworthy and sustainable use of AI.

In the coming years, specific measures and implementation steps will be developed from the fields of action with the aim of not only embedding AI into strategies in Lower Austria, but also making it noticeable in the daily lives of people, businesses and administration.

The AI strategy will be continually refined to address technological developments and make targeted use of new potential.

KI Advisory Board

The interdisciplinary composition of the Lower Austrian AI Advisory Board ensures that there a variety of perspectives for responsibly developing AI in Lower Austria.

- Chair: Mag. Friedrich Faulhammer
- Prof. (FH) Dipl.-Ing. Dipl.-Wirtsch.-Ing. Michael Bartz
- Julia Eisner, BA MA
- FH-Prof. Dipl.-Ing. Dr. Franz Fidler
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- Dr. Andreas Lederer, MBA
- Univ.-Prof. Dipl.-Ing. Dr. Stefan Oppl, MBA
- Univ.-Prof. Mag. Dr. Peter Parycek, MAS MSc
- FH-Prof. Dipl.-Ing. Mag. Marlies Temper, Bakk.
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- Mag.^a Carina Zehetmaier, E.MA

Dr. Heidrun Maurer from the University for Continuing Education Krems was responsible for overseeing the development of the strategy from an academic perspective.

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