ESTONIAN ENTREPRENEURSHIP UNIVERSITY OF APPLIED SCIENCES

EEUAS IBA (2024-2026) student initiative to provide "Timely, Accredited" Artificial Intelligence Information, News from around the World, EU, Nordic, Baltics and Estonia in support of OSKA , Eesti skills report 2025

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5 important questions to ask about using AI solutions in your business

Artificial Intelligence has become a natural part of everyday work , but how prepared are Estonian companies for the risks it poses ?

It is important to know exactly which AI solutions the organization uses and which risk category they fall into (the image is illustrative). Photo: Austin Distel/Unsplash

We encounter AI every day – personalized ads, meeting summaries created by Copilot, or marketing texts written with ChatGPT. All of these activities mean that data is processed in or by AI solutions.

The company has a great responsibility: it must take into account intellectual property protection, ethical use , and privacy requirements. This requires considering how data is processed, what the risks are , and how to prevent and manage these risks, and how to prevent and manage these risks.

Here are five important questions to help you assess your organizations readiness for artificial intelligence.

Q1. What artificial intelligence solutions are in use in our organization?

Ans.The European Union's Artificial Intelligence Regulation (AI Act) divides AI applications into four risk categories, which determine the obligations associated with their use. Most everyday AI tasks and tools used in companies fall into low or specific transparency risk categories. For example, chatbots, generating marketing texts, creating images or compiling meeting summaries.

This means that, for example, in the case of ChatGPT and chatbots , the user must be clearly informed that he or she is interacting with artificial intelligence. Text, Images or videos generated by AI should ne marked as AI – generated content, if necessary.

However , high – risk AI solutions, such as medical software of systems used in recruitment , must meet significantly stricter requirements. They are subject to additional requirements for data quality control, clear user information, and human oversight.

Therefore, it is important to know exactly which AI solutions your organization uses and which risk category they fall into to ensure transparency, accountability, and compliance with applicable legislation in their use.

Q2.What data do we process in AI systems?

Ans.The risk level of a tool may not always reflect the sensitivity of the data being processed by the AI system. For example, an employee may use a personal ChatGPT account to analyze client documents, even though the client agreement requires data confidentiality and established damages in the event of a data breach.

Such situations highlight the need to clearly define what data is processed in AI solutions and ensure its security and confidentiality in accordance with laws and company policies.

Q3. Is the use of AI solutions compliant with data protection and privacy requirements?

Ans. Before deploying, it is necessary to ensure that they comply with the requirements for processing personal data, including the protection of data subjects' rights, data retention time limits, and the principles of security and transparency.

For example, it may happen that during a client meeting, consent is not asked for to be recorded using AI , which can later cause conflicts both with clients and within the organization.

Q4. Do we also process the data of our contractual partners in AI systems?

Ans.When a company collaborates with external service providers or partners, it is important to ensure that the data processing related to them complies with the data processing and security requirements set out in the contract. To do this, it is necessary to clearly set out in the contracts the security measures and data protection requirements that regulate how the partners process and protect the data of the parties to the contract and their customers.

Q5. Are the results of AI systems validated and verified by humans?

Ans. While AI can provide recommendations or assist in decision-making, it is essential to ensure the reliability of these results through human oversight. Artificial intelligence can be helpful in credit assessment analysis or in the recruitment process, but it is important

that these processes are validated and controlled by humans. Controlled and tested AI-based decisions help to avoid potential bias or errors in machine learning models and ensure that the final decisions are reliable and in line with the company's values and applicable standards.

Taltech invited Estonian universities to create an AI consortium to establish a solid framework

Tiit Land, Rector of Tallinn University of Technology, called for Estonian Universities to join forces to cooperate in the field of artificial intelligence.

Artificial intelligence should be used horizontally throughout the university, confirmed Gert Jervan, Dean of TalTech's IT Faculty. Photo: Piret Rãni

Among other things, this would allow universities to hold more meaningful negotiations with global technology companies to bring the best tools and practices here.

The TalTech initiative is driven by the desire to ensure that artificial intelligence , or AI is treated in a similar way and implemented ethically in all Estonian higher education institutions. This requires tools, computing power, sharing of experiences, and a clear legal framework.

It is time for universities to work together to establish a solid framework for both students and faculty and ensure the wise and responsible use of ICT throughout the academic system, said Tiit Land.

Dean of the Faculty of Information Technology, University of Technology, according to Gert Jervan, artificial intelligence is here to stay. However, TalTech has long – term experience in the field – the university has been working on artificial intelligence for decades. A focal point center of excellence has also been created to enhance activities.

“Our goal is to use artificial intelligence horizontally across the university – from teaching and research to administration,” Jervan said. “ We will do it wisely, scientifically, and ethically,” he affirmed.

Currently three universities (TalTech, University of Tartu and Tallinn University) have gathered their initial wishes and are trying to find a solution to them within the framework of the TI-Huppe framework agreement. Through the consortium being created , it would be possible to expand and deepen this cooperation, in order to achieve the spread of best practice on the one hand and cost savings on the other.

It is also important for Estonia to develop its own computing power with the Estonian Research consulting infrastructure(ETAIS), taking into account not only research but also the needs of teaching. This pan- Estonian e-infrastructure offers cloud services, classic scientific computing, hosting and management services for scientific web applications , and resources for repositories. In addition , EITAS provided access to the fastest supercomputer in the Nordic countries, LUMI, which is located in Finland.

University of Taru is investigating how to improve business processes using artificial intelligence

Marlon Duman, Professor of Information systems at the Institute of Computer Science at the University of Tartu, received a grant from the European Research Council (ERC) to support research into Innovation and market maturity of research results. The work concerns the optimization of business processes using artificial intelligence.

Marlon Dumas, Professor of Information Systems at the Institute of Computer Science, University of Tartu. Photo: Andero Kalju

In the new project “AI – Assisted Optimization of Business Processes”, Dumas and his team are developing automated methods that allow them to analyze problems in the performance of business processes and search for and evaluate opportunities to solve them.

Dumas’ work will result in a tool called Optimose, which allows the user to ask questions about how a process works, such as examining which parts should be simplified or automated to reduce errors and provide an optimal customer experience.

For automatic performance analysis, Optimos uses algorithms in addition to data from the company’s information systems. Based on these, the tool provides answers that visualize the causes of inefficiencies and shortcomings and their potential solutions. After the analysis, Optimos can be asked to investigate the possible scope of necessary changes and optimize them, for example, adjusting batch processing or prioritization principles, resource utilization plans and decision rules.

The tool will be tested in three pilot projects to verify the suitability of the methods for use in companies. At the same time , the university researchers will also collaborate with a business development consultancy to prepare a market analysis and a business plan to find suitable ways to commercially apply the research results.

Survey of 3853 teachers: to what extent is artificial intelligence used in Estonian Schools?

Artificial Intelligence is already widespread in Estonian Schools, more so among elementary schools teachers than high school teachers , according to a recent study.

A study on teachers' use of AI was presented this week by Tallinn University researcher Piret Oppi. Photo: Tallinn University

Among other things, it turned out that there is no connection between the length of work experience and the use of artificial intelligence; what is more important is the teacher's confidence and perception of practical value.

This week, Tallinn University researcher Piret Oppi introduced a new study , according to which 53.2% of Estonian teachers already use artificial intelligence tools in their teaching. "Teachers today use artificial intelligence, for example to provide feedback on students work , assess them , devise lesson plans, and plan lessons," Oppi highlighted.

The study revealed that primary school teachers (66%) are the most active uses of AI, while 50.1% of high school teachers use AI. Teachers who already have practical skills and knowledge that AI is useful in teaching are using AI in their work.

2/3 of elementary school students have used AI

Ti-Hupee CEO Ivo Visak emphasized that in addition to teachers , the use of artificial intelligence is also widespread among students.. A recent study by the Institute of Social Sciences of the University of Tartu, EU Kids Online, shows that two-thirds of students in grades 3-9 have used artificial intelligence in their studies in the past month. This is mainly to summarize long texts or get explanations, and to write essays or stories for school work.

“The data clearly shows that AI is present in schools today, but often in an unintended form,” Visak emphasized . He pointed out that problematic usage practices – such as giving homework to an AI – are becoming more entrenched every day. Therefore, intervention, the development of AI applications that support learning, and a support for teachers are essential.

TI-Huppe teacher support program begins

“Today is no longer the time to pull the brakes : we need to move forward at full speed in managing the effects of artificial intelligence in education, even in a situation where there is still a lot of ignorance,” added Ivo Visak, who before joining TI-Huppe headed the state upper secondary school in Kuressaare.

The TI-Huppe teacher support program will begin in August , where in addition to practical training on learning and artificial intelligence and a free app, teachers will be supported with school-based study groups or study circles and virtual communities. Thorough preparations will also be underway throughout the summer for the introduction of a learning app that supports learning.

Piret Oppi highlighted that in order to implement artificial intelligence in a way that supports learning , it is necessary to emphasize programs that would help teachers learn about the benefits and application of artificial intelligence.

Students usage practices do not support learning

The four pillars of the TI-Huppe teacher support program , which will start in August, are nationwide training, school – based study circles , a virtual community , and free access to artificial intelligence applications.

During the training which begins in August, teachers will receive an overview of the following topics:

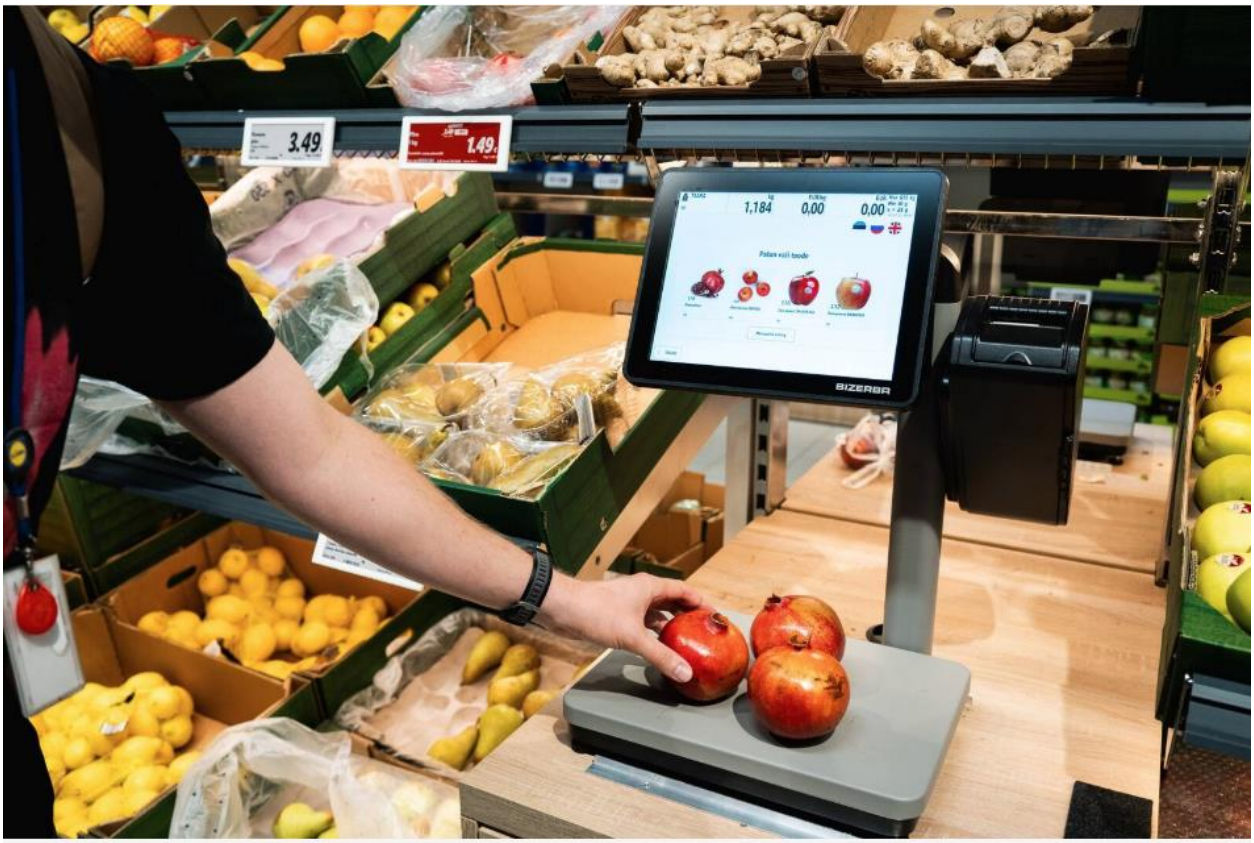
- ✓ Introduction to the TI-Huppe pilot year
- ✓ Artificial intelligence and language modelling
- ✓ Learning with TI: what is the impact on the development of thinking?
- ✓ Teaching with TI: What to try
- ✓ Introduction to the learning – supporting application
- ✓ Recommendations for guiding learning practices

In addition to periodically held study groups, starting in the fall, teachers will also be able to provide each other with a “power shoulder” by communicating in a virtual community and learning application.

TI-Hupe is an educational innovation program inspired by the Tiger Leap that began in the mid-1990s and born from public – private cooperation, within the framework of which Estonian school children and teachers will gain access to artificial intelligence learning applications and the skills to use them in teaching. The first phase of the project will begin in grades 10-11 on September 1.

Lidl’s artificial scale recognizes fruits and vegetables on its own

The Lidl store chain in Estonia was one of the first markets to introduce new AI based smart scales that automatically recognize the fruits and vegetables placed on the scale.



The Lidl store scale is equipped with artificial intelligence. Photo: Lidl

“These are intelligent scales that automatically recognize fruits, vegetables and bakery products without having to browse the catalog or enter codes,” introduces Lidl Estonia’s communications manager Katrin Seppel , who days that the Estonian market is one of the first for Lidl where innovative technology is being implemented in the chain. “There is a simple reason for this – the Estonian consumer is innovative and very receptive to new technologies.”

The unique feature of the technology , which is being introduced for the first time in Estonia, lies in the scales ability to learn with each use. The artificial intelligence based system offers the most likely products based on a visual analysis of the goods placed on the scale and allows the buyer to make a quick choice among them. The more customers use the scales, the more accurate the system becomes.

EU uses artificial intelligence and blockchain to stop the flow of dangerous good

The European parliament adopted recommendations on how to control the influx of potentially dangerous goods from non-EU online stores and found that artificial intelligence , block chain technology and other digital solutions should also be used to enhance customs controls.

Airport screening equipment should not be purchased from unreliable sellers Photo: AFP/Scanpix

E – commerce has grown exponentially in recent years , and in 2024, an average of 12 million packages a day arrived in the European Union from online stores in third countries. This has put European custom officials and market surveillance authorities , whose task is to ensure the safety of goods entering the Union , in a difficult situation – with such large parcel flows, this is simply impossible

One recommendation is that faster digitalization , and in particular the introduction of artificial intelligence and blockchain technology, could somewhat alleviate the overload of custom authorities, allowing for more efficient control of goods. Therefore ,European countries should allocate more money to custom authorities to implement digital solutions . The EU and its member states should also more vigorously require online shops and platforms to comply with all obligations that the EU has imposed on them, for example , under the Digital Services Regulation, the General Product safety regulation, the Digital Markets regulation and the Market Surveillance Regulation.

Furthermore, Parliament believes that countries should restrict access to their critical infrastructure and border security systems by unreliable vendors,for example by not purchasing security equipment used in airports and ports or cargo screening equipment from them.

Summer School registration has begun!

The 2025 summer school will take place on August 11-12 at the Viljandi Vocational Training Center in Vana-Voidu

This time’s motto is “In the primeval rhythm with technology”, which carries a message – how to find the intersections between new technologies and traditional lifestyles

Summer school information and registration information can be found here:

https://sites.google.com/view/htsk2025/

Article 3: Definitions

Date of entry into force:

2 February 2025

(1) ‘AI system’ means a machine-based system that is designed to operate with varying levels of autonomy and that may exhibit adaptiveness after deployment, and that, for explicit or implicit objectives, infers, from the input it receives, how to generate outputs such as predictions, content, recommendations, or decisions that can influence physical or virtual environments;

(2) ‘provider’ means a natural or legal person, public authority, agency or other body that develops an AI system or a general-purpose AI model or that has an AI system or a general-purpose AI model developed and places it on the market or puts the AI system into service under its own name or trademark, whether for payment or free of charge;

Interpretation

Article 3 of the AI Act defines a ‘provider’ as a natural person or legal person , public authority, agency or other body that:

Develops an AI system or a general purpose AI model or

That has an AI system or a general-purpose AI model developed and places it on the market, or

Puts the AI system into service under its own name or trademark, either for payment or for free

(3) ‘deployer’ means a natural or legal person, public authority, agency or other body using an AI system under its authority except where the AI system is used in the course of a personal non-professional activity;

Interpretation

A ‘deployer’ on the other hand means a natural or legal person , public authority, agency or other body using an AI system under its authority, except when the AI system is used for personal non-professional activity

This newsletter is part of “AI Knowledge” initiative by student anurag mittal, email anurag.mittal@eek.ee at IBA Progran, EEUAS, Tallinn, Estonia